OCTOBER 23, 1943

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Railway Age

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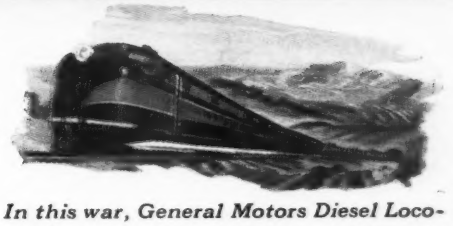

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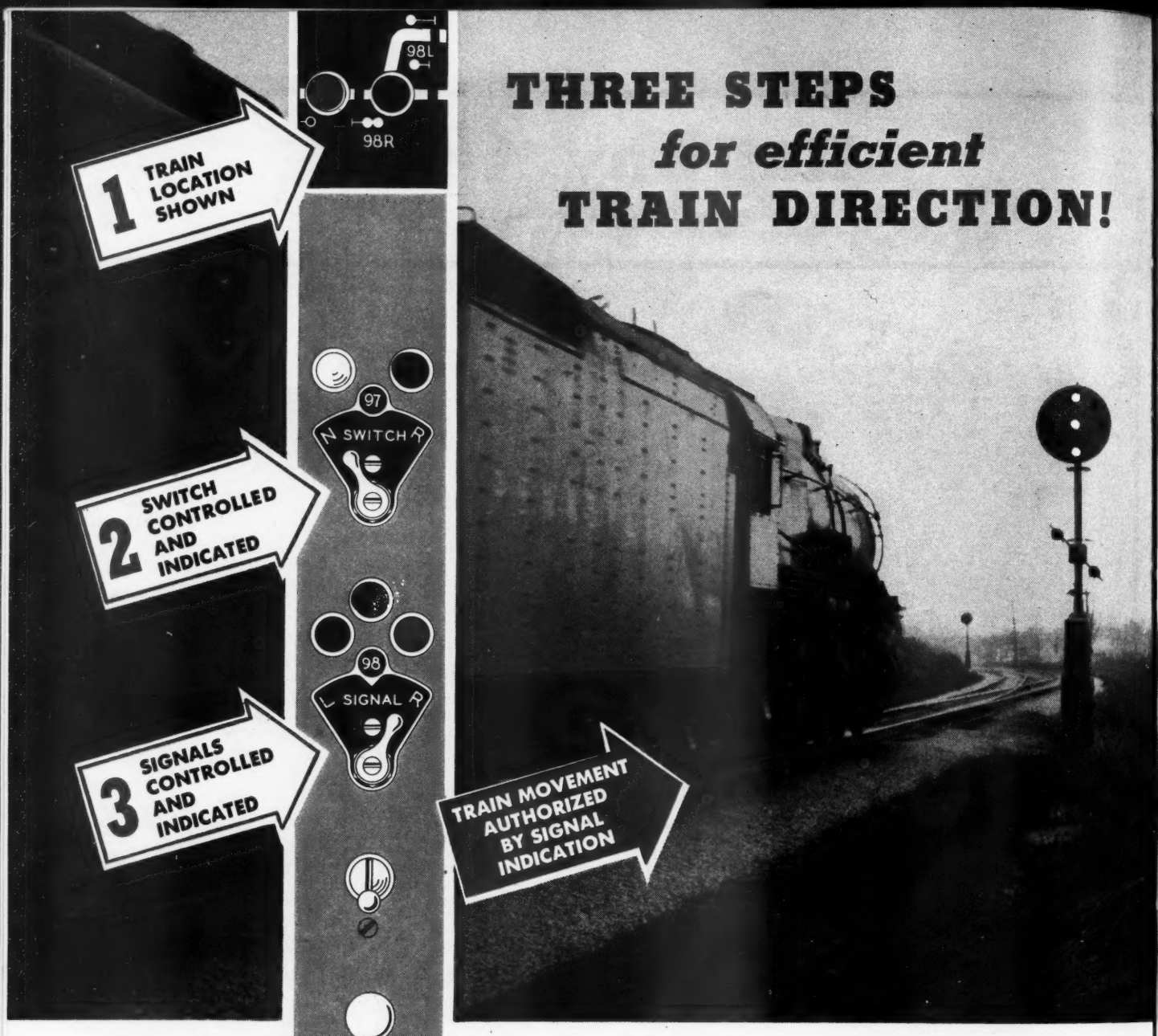
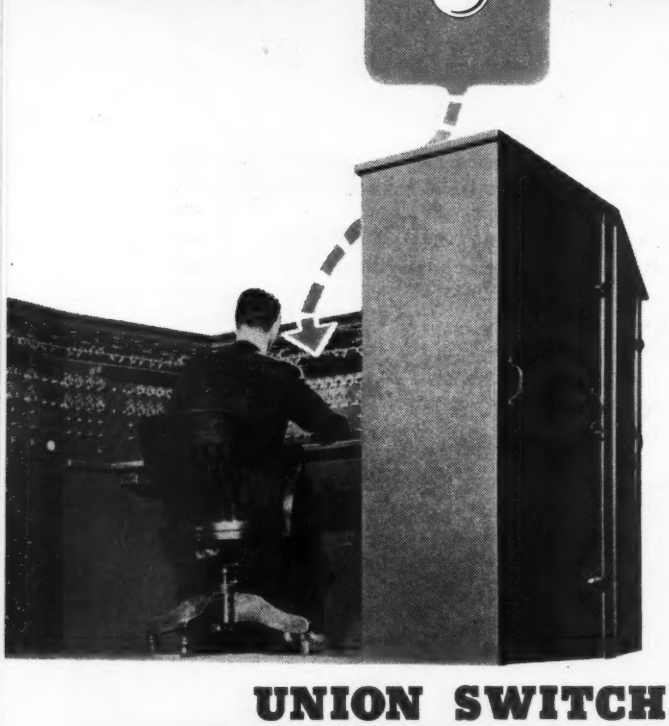
THREE STEPS *for efficient* TRAIN DIRECTION!





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The Week at a Glance

WAGE BOARDS FLOUTED: The official publication of the Clerks' union has managed to hit the nail right on the thumb—by an assertion that the emergency board's award of 8 cents per hour more money to the non-ops "should have ended the matter", without Mr. Vinson's interdiction. Decisions of emergency boards have not "ended the matter" when the brothers have been dissatisfied with the results. Indeed, the non-ops themselves rejected the very emergency board report which the Clerks' magazine now says "should have ended the matter". The brethren rejected the wage increase granted them by an emergency board on the eve of Pearl Harbor, and, with President Roosevelt's help, got more out of the railroads than the board said they should get. The enginemen were "insulted" by a board report in the Diesel case, last May, rejected it, and got more out of the railroads than the report said they were entitled to. The ops have again been "insulted" by the 4-cents-an-hour increase recently awarded them by an emergency board, and this week are meeting in Chicago, with the apparent intention of rejecting it.

●

AN OVERRATED LABOR ACT: Meantime, the leaders of the organizations—by public expressions that "outlaw strikes" are threatened—are in effect putting the idea of such action in their members' heads. The leading editorial herein suggests that the Railway Labor Act has received credit for "maintaining peace" which it does not deserve. What has "maintained peace" has been concession to the brothers of substantially what they have demanded. They have enjoyed, so far with impunity, the privilege of rejecting emergency board awards whenever they have felt so inclined—a prerogative they now deny to duly constituted government authorities, in the exercise of their duty to control wartime price inflation.

●

10% MORE WORK FROM CARS: The shippers' boards do not take lightly the part they must play in the O. D. T.'s program for squeezing yet 10 more per cent of service out of the available freight car supply—as our report herein on their St. Louis meeting last week bears witness. Commissioner Johnson warned the shippers that, if this 10 per cent improvement is effected, they may still "enjoy some of the comforts of transportation you now have"—but, if the improvement is only 3 per cent "you are going to make many more sacrifices than you never dreamed of". The specific nature of the job to be done, and methods for the attack, are surveyed in our account of the meeting.

●

REDUCES GRADE AND CURVES: A 15-mile line revision on the Rock Island in northern Missouri has reduced the eastbound grade on a busy single-track route from virtually 1 per cent to 0.5 per cent, and prevailing curvature from 3 deg. to 1 deg.—thus extending the territory (all the way from Tucumcari, N. M., to Trenton, Mo.) on which these maxima have been established. The job—described and illustrated in an article in this issue—was not an easy one, because of the poor grade of soil (from the embankment-construction standpoint), to control which appropriate modern methods (compacted fills, 1½ to 1 slopes, benching) were applied.

●

BOILER EXPLOSIONS: It appears that not all enginemen have a vivid picture in their minds of how quickly a crown sheet goes dry after the water vanishes from the water glass. If all enginemen grasped the dangerous fact, they would move more quickly than some of them do to kill the engine when pump or injector failure brings the water gage to a low level. The importance of dramatizing this situation to enginemen, and how it may be done, are discussed in an editorial herein.

●

WAYLAND COLLISION: The I. C. C. report on the sideswiping collision involving the "Lackawanna Limited" on August 30 has been issued, and is reviewed in the news pages in this issue. Commissioner Patterson believes this accident to have been "the direct result of the long-standing practice of inferior trains using the main track on the time of superior trains without procuring authority in the manner prescribed in the book of operating rules." It is recommended that "the unsafe conditions disclosed by this investigation be corrected immediately."

●

NEED TO IMPROVISE: President Norris of the Southern foresees the railroads at the war's end, faced with the imperative competitive necessity to revise and improve their services—and without the funds to effect this transformation as rapidly as, ideally, it should be made. The carriers, therefore, will need a degree of ingenuity comparable to that they are now exercising in "making it do"—to spend the money they *can* for those improvements which will be competitively most effective. Along with their ingenuity, a lot of courage will be needed—because it takes that quality to bid farewell to comfortable habit, substituting action based on hard thinking therefor. Mr. Norris' made known his views on this absorbing topic at a meeting of the Western Railway Club this week—and we summarize them in a short article.

●

DOG IN THE MANGER: Unable from their own ranks to supply the needs of the railroads for labor to move the nation's war traffic, the railway union magnates are unrelentingly opposing other expedients by which the acute labor shortage might be alleviated. The Railway Labor Executives' Association, persisting in its opposition to the use of prisoners of war for railroad work, now comes forward with a "whereas" to the effect that such employment would contravene the "Geneva convention," dealing with the manner of treatment of such prisoners.

DISINGENUOUS PIETIST: The Vice-President of the United States has delivered an address against the railroads, reviewed in the news pages of this issue, which is dominated by the demagogic inaccuracy which has come to be expected of the public utterances of this official, of outward mien so saintly. He asserts that "financial exploitation" of the railroads has placed an "unbearable burden on the people." He blames the railroads for "agreements and conspiracies" by which motor carrier rates are alleged to "have been raised to the level of the rail rates." This, he further asserts, has resulted in "eliminating all competition in rates" and, consequently "the public is deprived of the savings from cheap highway and water transport." He makes other accusations of similar absence of even a trace of veracity—and winds up asking: "Are the American people to be victimized by the scheme for integrated transportation."

●

ABETS WHAT HE ATTACKS: It is not difficult to see what Mr. Wallace is heading for, and possibly even aiming at. His utterances parallel the "party line" of the operators of inland waterway and air transportation who bitterly oppose the disruption of their present monopolies, which would occur if the railroads were permitted to offer such transportation; and of carriers by highway who seek to be relieved of railway competition thereon. While delivering a rhetorical attack on "monopoly," the Vice-President is trading on his reputation for disinterested sanctity, actually to abet the misdemeanor he pretends to execrate. With the railroads performing almost superhuman service of the most vital kind for the country in its hour of need—the nation's no. 2 public official not only has not a morsel of gratitude to or praise for them, but treats them instead to a tirade of groundless abuse.

●

QUID PRO QUO: The railways of Canada have told the Dominion government just how many jobs they expect to be able to provide for Canadian citizens after the war—but they have attached some necessary conditions to their commitments. That is, as an editorial herein indicates, they will directly and indirectly afford such employment of that magnitude (substantially equal to or even exceeding present railway working forces) *provided* the people, their government and organized labor will reciprocate by establishing the surroundings under which it will be possible or justifiable for railways to make further large investments of capital. Perhaps people would feel more inclined to insist on a reasonable degree of justice for the railroads, if everybody knew in exact figures just what such treatment would bring *to them*, in the way of jobs and patronage of their businesses.

●

"SPECIAL" BOARD NAMED: As with the Pacific Electric case, the President has named a "special" board to review the wage dispute between Mr. Vinson and the non-ops.

DREADNAUGHT ENDS

PROVIDE

STRENGTH–

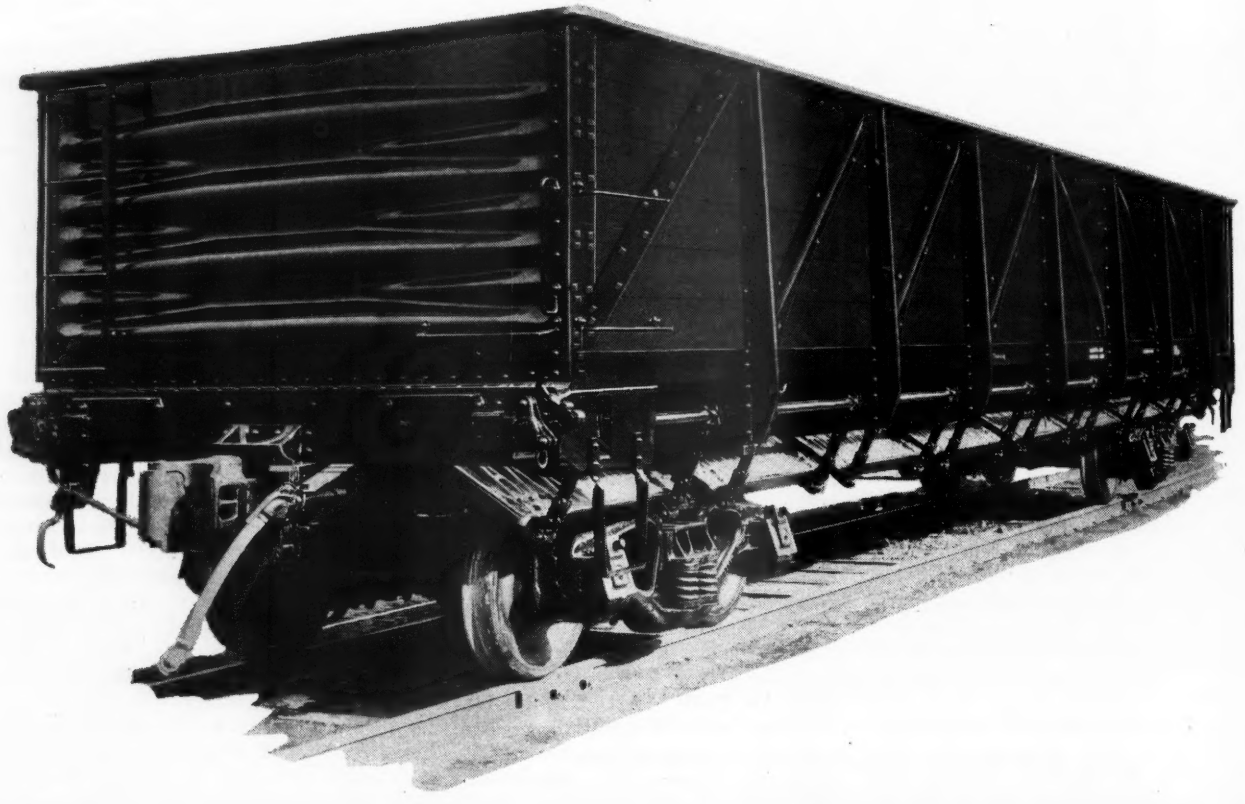
UNIFORM OVER ENTIRE SURFACE.

RUGGEDNESS

A MUST, WITH INCREASED LOADS AND SPEEDS.

RESILIENCY

TO CUSHION SHIFTING LOAD SHOCKS AND PROTECT CAR SUPERSTRUCTURE.



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RAILWAY AGE

Should Emergency Boards "End" Railway Labor Disputes?

A most surprising statement regarding settlement of railway labor disputes is made in an editorial in "Railway Clerk" for October. This magazine is published by the Brotherhood of Railway and Steamship Clerks, Freight Handlers, Express and Station Employees, of which George M. Harrison is president. The statement referred to is made concerning the action of Stabilization Director Fred M. Vinson in rejecting the recommendation of an Emergency Board appointed by President Roosevelt which proposed an advance of $204 million a year in the wages of railway non-operating employees. "An Emergency Board found after several months of testimony that an increase of 8 cents an hour was justified and recommended such an increase," says "Railway Clerk," and then adds: *"That should have ended the matter."*

Efficiency FOR VICTORY

There has been no recent important instance of railway labor leaders letting the recommendations of an emergency board appointed under the Railway Labor Act "end the matter." For two years they have been consistently refusing to let such recommendations "end" disputes. They were, in fact, the first to reject the *very same* recommendations which "Railway Clerk" now says "should have ended the matter," and appealed to President Roosevelt. The President asked the board that made them to reconvene and reconsider its recommendations. This the board declined to do. Next Mr. Vinson rejected the recommendations because proposing advances in wages that exceeded those permissible under the government's stabilization policy. Then, on the President's suggestion, conferences were held which resulted in agreement by representatives of the railways and the labor unions to accept the recommendations with some modifications. Mr. Vinson rejected this agreement also. And now the President has appointed a new Emergency Board to hold more hearings and make new recommendations regarding this same dispute!

An Emergency Board appointed by the President made recommendations for advances of all railway wages in the fall of 1941. The labor leaders not only rejected them, but ordered a nationwide strike rather than accept them, and the President intervened and caused greater advances to be made than had been recommended. On May 21, 1943, another board appointed by the President made recommendations regarding employment of extra men on Diesel locomotives. The unions rejected them, also, and the President got the railways to renew negotiations, with the result that the unions again got more than a board appointed by him had recommeded. When the unions of non-operating employees rejected the recommendations which "Railway Clerk" now says "should have ended the matter," it was the third time within a year and a half that railway labor unions had refused to accept recommendations made by Emergency Boards appointed under the Railway Labor Act.

And while this issue of *Railway Age* is appearing the "Big Four" operating brotherhoods are holding a meeting in Chicago at which, apparently, they will reject the recent recommendations of an emergency board for a 4-cents-an-hour increase in the pay of their members. Meantime the leaders of all the railway unions, who are bound by a "no-strike" pledge, are inciting their members throughout the country to action by broadcasting statements that the leaders will soon be unable to prevent "outlaw strikes" unless the President

causes larger advances in wages than Stabilization Director Vinson will agree to.

What, then, is the significance of the statement in the organ of the railway clerks' union, which it seems improbable was made without the approval of President Harrison? The purpose of the Railway Labor Act is to cause disputes to be settled without strikes or threats of strikes. The act has been fulsomely praised on the ground that it has "maintained peace" on the railroads. The record proves this is not true—that, on the contrary, after all the procedure prescribed by the act has been carried out, strikes have been prevented only by the railroads being virtually forced to give the unions more than boards appointed by a President extremely friendly to organized labor would recommend.

The acceptance hereafter by Mr. Harrison and other railway labor leaders of the doctrine that recommendations made by Emergency Boards "should end the matter" would certainly be more conducive to fair and peaceful settlements of labor disputes on the railways than their past policy has been. But it is not their real position that the labor unions be perfectly free to reject such recommendations at any time, while railways, and even government authorities created expressly to pass on them in time of war, should never be free to reject any recommendations that the unions are willing to accept?

Locomotive Boiler Explosions

In a roundtable discussion on means of guarding against low water in locomotive boilers and resulting explosions, in the October "Railway Mechanical Engineer", Edward H. Heidel, boiler foreman of the Chicago, Milwaukee, St. Paul & Pacific, emphasized the great rapidity with which water is evaporated in the boiler and the necessity for taking prompt and positive action when it drops out of sight in the water glass. He pointed out that a modern locomotive boiler contains about 6,000 gal. or 50,000 lb., of water. Ordinarily the lowest reading in the water glass registers about four and a half inches above the top of the crown sheet; at that time there are approximately 720 gal., or 6,000 lb., of water available for evaporation before the highest point in the crown sheet is uncovered. "The time available for the engine crew to make any move calculated to overcome the difficulty resulting in low water, is, therefore, limited to something like five minutes, more or less," said Mr. Heidel, "depending upon whether the engine is on level track or a grade and how hard it is working."

A general supervisor of boilers on another railroad, in commenting on these facts, suggests that a chart be prominently posted in every locomotive cab, showing the time required under normal operating conditions—but on the supposition that the water supply to the boiler is cut off—to evaporate each one inch to the top of the crown sheet, starting with a showing of one-half inch in the water glass. It is believed that if the engineman can be made to understand more clearly and vividly the limited time available, they will take more prompt action when the pumps or injectors fail. There is, indeed, "a narrow margin between perfectly safe operation and disaster".

The enginemen have the most at stake in boiler explosions, although the lives of other employees and passengers are also endangered. In spite of this, the records disclose that too frequently such accidents are apparently due to carelessness or failure to act promptly on the part of the engine crews. Every possible means should be used to dramatize the possibilities of danger and keep it continually before all of those who have any responsibility for the locomotive boiler and its operation.

Don't Waste Ideas

An important source from which mechanical improvements often develop is the ingenuity displayed by "the men on the job" as they work out the problems with which they are confronted daily. Not all workmen are able to add to the pool of mechanical knowledge, but it is unfortunately true that many who have something to contribute are unable to do so because they are not encouraged or because there is no set channel through which they can make their ideas known.

The development of adequate handling by management of employee suggestions offers great possibilities for increased production. It is true that many companies, among which are a number of railroads, encourage and in some cases pay for such suggestions. Whatever the compensation, whether it be financial or merely a credit line in a company publication, good workmen like to tell the story of what they have done, or can do, on their jobs.

One railroad, after many years of experience with a labor-management co-operative arrangement, has set up a company-wide system for the handling of all mechanical suggestions received from employees. Local supervisors are charged with the responsibility of selecting the ideas which should be passed on to their superiors. Master mechanics, or the regional superintendents of motive power, determine which of these merit system-wide adoption. Those chosen are forwarded to the supervisor of shops for the entire system. Such ideas may be adopted after thorough study as general practices for the entire road. If they are not applicable at all points, a limited order may be issued designating the points at which the recommended procedures are to be followed.

Within limits local supervisors are allowed discretion in the spending of company funds to determine the usefulness of an idea. Any which involve large expenditures must first be passed upon by responsible mechanical department authorities. The important thing is that all good ideas go through to the men at the top who are trying to improve system-wide performance. Thus, no good idea is wasted.

Canada's Railways Are Explicit on Post-War Plans

It will be a political necessity and also a moral duty for the nation to provide jobs for returning soldiers at the end of the war, as well as to continue employment of present workers who desire employment. These jobs will have to be furnished almost entirely by private enterprise, unless the country is to descend into socialism, and thus lose the freedom in defense of which the war is being fought. If private enterprise is to fulfill successfully the big employment task ahead of it, two prerequisites must be attended to: (a) private enterprise must seek out in advance its opportunities for profitable maintenance and capital outlays on a large scale, and (b) government must be induced to provide the political atmosphere in which business management can soundly and honestly make heavy expenditures.

The two leading Canadian railways have recently presented testimony to a committee of the Dominion Parliament which is a model of realism among the mountains of rhetoric which have been uttered on the subject of "post-war planning." These railways submitted to the legislators at Ottawa definite totals of the number of post-war jobs they are prepared to offer—but they based their estimates *on the assumption that the government provide political conditions which will justify large capital expenditures on sound business principles.*

The Canadian Pacific informed the Parliamentary committee that a group of its executive officers has prepared a program of "special maintenance and deferred improvements, for some years after the war" which "should be sufficient to sustain the company's total direct and indirect employment of labor at a level close to that now existing." The legislators were reminded, however, that the company cannot be expected to embark in full measure on such expenditures unless it has reasonable assurance of (a) continuance of democratic government, with rights of private property unimpaired; (b) maintenance of private enterprise as the basic source of economic activity, subject only to constitutional regulatory laws and taxation; (c) the co-operation by labor with those who furnish capital in promoting employment under free enterprise; (d) reliance on private investors as the source of capital, together with a return thereon sufficiently attractive to bring forth, under individual freedom, the necessary funds.

The Canadian Pacific, in short, holds itself out to provide—not directly on its own payroll, but on its own payroll and those of suppliers of materials—just about as many jobs after the war ends as its present high employment level. To do this, it asks from the Canadian people, their government and from organized labor only that modicum of fair dealing which is necessary to secure adequate investment funds.

With a post-war national income at approximately its wartime level, the government-owned Canadian National believes it should be able to provide, directly, 33 million man-days of employment and, indirectly, 14 million additional (in supply industries) which is, if anything, somewhat more employment than it is now providing. The C. N. R. also, however, requires reasonably favorable external economic and political surroundings to justify it in expenditures at such a level—despite its government-owned status—because "it is repugnant to common sense to undertake projects which add nothing to the common weal but which merely redistribute purchasing power." The C. N. R., that is, sees as plainly as does the privately-owned carrier that its post-war expenditures must be largely governed by the external conditions which control its income—which conditions are determined in large measure by political action.

If the general public had a full understanding of what industry stands ready to do for it in the way of high-level post-war employment and productivity —and if the reasonable conditions necessary to permit industry to do this job were likewise widely known—it is inconceivable that there would be any fear either of poverty or socialism following the war. The danger lies in the fact that, generally speaking, people do *not* fully appreciate what industry is prepared to do for them, given an opportunity to do so; and still less is there popular perception of the things which the people (and their servants, the legislators) must do to enable enterprise to yield its full harvest.

In Canada these matters have been made more explicit than south of the border—especially in the case of the railways.

Poor Passenger Service

The quality of passenger service that the railways are rendering today is not what it should be; it is, in fact, definitely poor. Since all things are relative, however, there are no apologies due to the public for present-day service, for it is far better than, under the circumstances, could be expected. The railways are doing a splendid job under difficult conditions, and American railway passenger service is so far superior to that of any of the other warring nations as to leave no basis for comparison. But, despite the fact that the immediate business of winning the war is the all-important consideration, railway men are sparing a few moments now and then to reflect upon the effect of this poor service on post-war passenger traffic.

What will the enforced train-riders of today, many of whom would probably never have boarded a train except for the war, think of railway passenger service? To those who were accustomed to the ease, the comfort and the spaciousness of railway travel in pre-war days, the answer seems obvious; they will think it is terrible. Investigation discloses that such snap

judgment may well be wrong. Those who recollection dates back to the last century may remember that the railway travel of that day was hardly a luxury. The pot-bellied stoves in the winter, and the heat, soot and flies in summer, have no counterpart in present-day service; yet most people of those days saved their pennies to get enough cash to take a train ride.

Comfort and luxury are relatively unimportant to youth, and youth makes up a large percentage of contemporary train-riders. To youth, the spirit of adventure and cameraderie are far more attractive than mere comfort, and cameraderie is certainly available in large proportions on the crowded trains of today.

It has been said that the war will make the nation air-minded. To a large extent this may be true, but the mass group of potential passengers of the post-war era, although possibly air-minded, will not be "air-pocketbooked". The price of travel will be just as much of a controlling factor then as it has always been.

The discomforts of present-day rail travel will have little effect on post-war passengers. Travel by any other means of transportation today is either impossible or quite as uncomfortable. This does not mean that the railways can afford to be complacent. The best travel conditions possible under the circumstances should be offered and an intelligently optimistic viewpoint of post-war passenger traffic maintained.

The Second Scrap Drive

The initial meeting of a series of nine nationwide gatherings comprising the second National Railroad Conference for the purpose of spurring the collection of ferrous scrap on the railways is reported elsewhere in this issue. Sponsored by the War Production Board, the conference presents a striking paradox. While one agency of the government imposes severe restrictions on the allocation and supply of the very materials that are so essential to the maintenance of all railway transportation facilities, and another urges even more extensive methods of material conservation, still another division points an accusing finger at the decline in ferrous scrap production and exhorts the roads to more intensive methods in their efforts to maintain and increase the regular flow of the product that is so essential to steel production.

The most striking feature of these meetings was the natural reaction and response of American railroad men to their nation's plea for more scrap. There were no lengthy resolutions framed in patriotic oratory; but in serious roundtable discussion they faced the situation, considered the difficulties to be met, exchanged ideas regarding the ways and means best suited to solving the problem, and with a full appreciation of the present national need pledged full cooperation, before they left to return to their individual tasks in collectively assisting in handling the greatest transportation job of all time.

Although in normal times the railways are the largest producers of purchased scrap in the country, the lack of general programs for the rehabilitation of locomotive, freight and passenger car equipment, the stringent governmental control and severe restriction on the allocation of steel for rail renewal programs, and the introduction of far-reaching reclamation practices, have combined to restrict to a very appreciable extent the regular flow of current railway scrap.

The intensive scrap-collecting campaign that was inaugurated during the summer of 1942, and which, for the most part, has been maintained continuously ever since, undoubtedly has brought to light by far the greater portion of the dormant scrap along the right-of-way. Here again, the open forum revealed optimistic individuals whose personal experiences attested the fact that dormant scrap still remains to be gleaned from areas that once were considered "as clean as a hound's tooth".

Many have been prone to adhere to the frugal hoarding ways of the New England colonist and the settlers of the Western plains—but the time has come when the best possible use can be made of old machinery by helping to assure a plentiful and continuous supply of the munitions and machinery of war to our forces in all quarters of the globe.

Federal Control of the Mines

On May 1, the federal government took sweeping possession of the mining properties and other assets of the entire [coal] industry. This seizure by government of the properties of an entire industry gave rise to immediate and widespread apprehension and concern. Some feared a flood of restrictive regulations, financial tinkering by remote control from Washington, and red tape that might bind up the management of the mines so that coal production would be throttled. The question was asked whether this situation might lead to permanent government possession of the mines.

Now three and a half months have passed since and the Coal Mines Administration has completed the administrative job which had been dumped into its lap. None of the things feared from the seizure has come to pass. Of course, a *cure* for the difficulties which precipitated the seizure of the mines by the government can come only with the consummation of an industry wage agreement. We recognized from the beginning that the Coal Mines Administration did not have the jurisdiction to effect such a cure. Our responsibility was that of maintaining production pending the cure by others of the underlying cause of disruption.

The Coal Mines Administration did not advance one dollar to any mining company. And while some members of the industry did not like our refusal to play Santa Claus, I am confident that in the long run this policy was the right one to prevent the very kind of financial tinkering, interference with management and extension of government control that the industry as a whole feared might result from government possession of the mines.

The Coal Mines Administration is undoubtedly unique in being probably the only governmental agency that has driven hard, diligently, and expeditiously to work itself permanently out of existence.

—Deputy Coal Mines Administrator Carl E. Newton (President, C. & O.) in an Address to the National Coal Association, Cleveland, Oct. 15.

Line Relocation on Rock Island Speeds War Traffic

One of the Large 5000-Class Locomotives, Northbound, Pulling 69 Loaded Cars Up Mercer Hill on the New Line. Note the Height of Cut and Side Slopes of 1½ to 1

New route, involving modern, heavy construction, greatly improves operating conditions on important part of this system's line to southwest

IN the latter part of 1942, the Chicago, Rock Island & Pacific completed a line change 14.82 miles long in Mercer county, Mo., which greatly improved the operating conditions on one of its most important lines, expediting war traffic on this line and releasing locomotives formerly required for pusher service, for service elsewhere on the system. The line at this location is single track and runs nearly due north and south. It is part of the main lines between Chicago and California and also between Minneapolis, Minn., and Dallas, Tex., and, because the traffic of both of these routes moves over this line, it is one of the most important sections of the entire Rock Island system.

The new line, which is built to modern, heavy construction standards, extends from a point 1¼ miles north of Mill Grove, Mo., northward to a point ¾ miles north of Mercer, Mo. It has a virtual grade of 0.5 per cent for eastbound (northward) traffic, as compared to 0.94 per cent on the old line. The maximum grade on the new line consists of a short distance of one per cent momentum grade as compared with 1.575 per cent on the old line. Curvature was reduced from a maximum of 6 deg. and a prevailing curvature of 3 deg. to a maximum of 1 deg. 30 min. and a prevailing curvature of 1 deg. The old line had 17 curves with a total curvature of 593 deg., as compared with 9 curves having a total curvature of 182 deg. on the new line. The new route also reduced the distance by 1.27 miles and eliminated at "Buckeye Bend", a six degree curve four miles south of Princeton, Mo., with speed restrictions of 30 and 20 m.p.h. for passenger and freight trains, respectively.

This portion of the old Missouri division (now part of the Missouri-Kansas division) of the Rock Island, linking the southwestern and the northern lines of the system, was very difficult to operate. It was a heavy-traffic artery of the system, and Mercer Hill was the ruling grade on the division. Almost since the line was built, the Rock Island has planned to reduce the grade at this location, and relocation surveys were made at various times from 1906 to 1930. The depression then halted consideration of this project for several years.

The present line in general follows the valley of a branch of the Grand river north from Trenton, Mo., almost to Princeton. Just south of Princeton, the old line diverged to the west, crossed Grand river, and followed along the east side of the valley at the base of the hills for several miles. From Princeton north, it remained on a lower level as far as a siding named Alvord. Then it abruptly left the Grand river bottoms and, following a winding course paralleling a small stream, ascended on a continuous grade, rising 223 ft. in a distance of 4½ miles. Except for one minor relocation made about 30 years ago to eliminate some curvature and distance south of Princeton, the line in this vicinity was substantially as originally constructed in 1869.

The early relocation surveys followed the same route

as the former line, merely moving south of Alvord to begin the heavy grade and following the course of the same stream at higher elevations. One such survey reduced the grade to 0.6 per cent but the curvature and distance were not reduced materially. In 1939, when the relocation of this section of line was again considered, it was decided that the new line must have a virtual grade of 0.5 per cent and a prevailing curvature of 1 deg. These requirements were selected because a new main line had been built south of Trenton to Birmingham (near Kansas City, Mo.) in 1930 with a maximum grade of 0.5 per cent and a prevailing curvature of 1 deg., and because more recently completed grade changes west of Kansas City, on the main line to California, were planned at that time to provide a virtual grade of 0.5 per cent all the way from Tucumcari, N. M., (junction point with the Southern Pacific) to Trenton.

Final Relocation

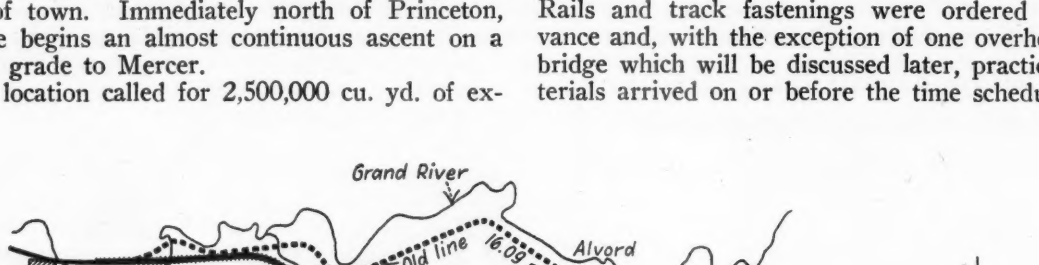
The new line follows an entirely different route from the old line and diverges as much as 2.6 miles. In order to eliminate some heavy curvature south of Princeton, the relocation was started about 5½ miles south of that town. From this point a line was projected almost due north, which required a new bridge over Grand river and necessitated very heavy cuts through rock hills east of the river to a point near the old main line about two miles south of Princeton where a large stream, known as Wildcat creek, empties into Grand river. At this point the new line diverges again from the old, leaving the Grand river bottoms and following Wildcat creek, whose headwaters originate near Mercer. This line passes through the southeast corner of Princeton, whereas the old line passed through the west edge of town. Immediately north of Princeton, the new line begins an almost continuous ascent on a 0.5 per cent grade to Mercer.

The final location called for 2,500,000 cu. yd. of excavation, of which about 450,000 cu. yd. was rock. The work also called for the construction of three steel bridges, seven overhead highway bridges, nine reinforced concrete boxes, ranging in size from 8-ft. by 8-ft. to 14 ft. by 14-ft., and the placing of 5,328 lin. ft. of culvert pipe. The largest cuts and fills were at the south end of the new line where it sliced through three large hills which projected toward the Grand river bottoms. These cuts also contained all of the rock excavation on the line. The grading on this portion was lessened somewhat by some rise and fall in the grade line joined by vertical curves and by a short stretch of one per cent momentum grade. However, the grading on the remainder of the line was also very heavy, because the watersheds in this part of Missouri break sharply from the ridges toward the valleys of even the smaller streams, and the limitations on curvatures made it necessary to cut through the hills rather than follow a winding course paralleling Wildcat creek.

As an example of the heavy grading required, the largest cut, located near the south end, between profile stations 695 and 721, had a maximum cut (on the center line) of 69 ft., and required 378,100 cu. yd. of excavation, of which 256,900 cu. yd. was rock. Another cut between profile stations 243 and 270 had a maximum cut of 55 ft. and contained 257,800 cu. yd. of earth excavation. A third cut between profile stations 508 and 520, had a maximum cut of 60 ft. and required 250,000 cu. yd. of earth excavation. The fills were nearly as large, the largest, between profile stations 530 and 565, had a maximum height of 36 ft. and contained 238,000 cu. yd. of embankment. The next three largest fills were as follows: Between stations 651 and 678, maximum height 37 ft., with 219,000 cu. yd. of embankment; between stations 721 and 735, maximum height 62 ft., with 223,000 cu. yd. of embankment; and between stations 162 and 201, maximum height 60 ft., with 223,000 cu. yd. of embankment.

Materials Secured in Advance

Before the location had been completed, the Rock Island had definitely decided to build the line, and plans were made to secure the necessary materials and proceed with the construction as soon as possible. Bridge steel for the railroad bridges was ordered and later a priority of A-3 (at that time a fairly good rating) was secured for the other critical materials needed. Rails and track fastenings were ordered well in advance and, with the exception of one overhead highway bridge which will be discussed later, practically all materials arrived on or before the time scheduled for use.

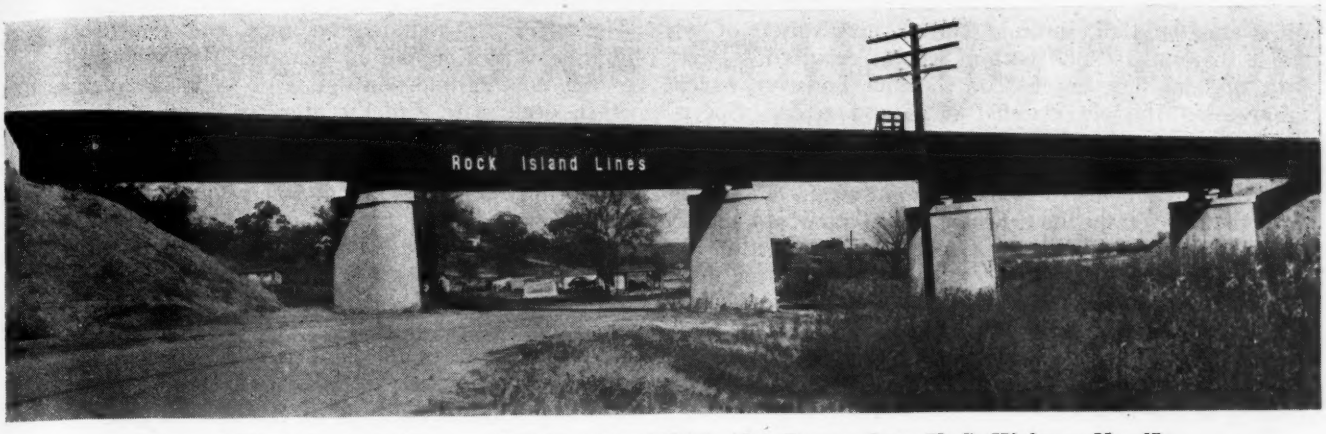


Sketch Map Showing the Location of the 14.82-Mile Line Change on the Rock Island Between Mill Grove and Mercer, Mo.

In the latter stages of the work, however, the contractors had some difficulty in securing repair parts for their equipment and the labor turnover was high, with both the railroad and the contractors experiencing trouble in keeping their gangs filled.

As soon as the location was completed, a contract was awarded for drilling test holes in many of the cuts to determine the soil conditions and the amount of rock present. Test holes were also drilled at foundation locations. When the test holes were completed, specifications were drawn up and bids were requested for the grading, bridge work, construction of reinforced concrete box culverts and the placing of culvert pipe.

The general contract for the grading on the entire



Upper Wildcat Creek Bridge on the New Line, Which Also Passes Over U. S. Highway No. 65

project was awarded to Condon and Kiewit Co.-Adventurers (George W. Condon Company and Peter Kiewit Sons Company, Omaha, Neb.). Construction was started on August 11, 1941. The grading work on the line was split into three parts as follows: The Condon Company took a section on the south end about 4½ miles long, which included all the rock excavation. Peter Kiewit & Sons took the center section about 7¼ miles long and the remainder, about 3⅛ miles long on the northern end, was subcontracted to Frank Eblen, Cumberland, Iowa.

Most of the soil encountered in this vicinity is red and yellow clay of a very poor grade from the standpoint of embankment construction, being unstable and having a low supporting capacity. For this reason, and because the Rock Island has had considerable trouble in the past with new line construction in similar soil conditions, it was decided that modern construction would be repaid many times over in later reduced maintenance. Accordingly, all earth cuts were excavated to 1½ to 1 side slopes with a 34-ft. bottom and all fills were compacted and constructed with 1½ to 1 side slopes and a 24-ft. crown. Additional benches 10 ft. wide were placed on fills for each 25 ft. of height. These were usually located half-way down the embankment.

Rock cuts were ordinarily excavated on a ½ to 1 slope although this was left somewhat to the judgment of the contruction engineer. Because the rock encountered consisted alternately of wide strata of blue shale overlaid with limestone, usually 2 to 3 ft. thick, and because the blue shale disintegrates on exposure to the air, benches 10 to 15 ft. wide were also provided in the rock cuts, selecting a heavy limestone cap-rock for the top of the bench to protect the underlying shale. At the top of rock cuts, benches 10 to 15 ft. in width were also provided between the rock slope and the toe of the earth slope and the overburden of earth in these cuts excavated on a 1½ to 1 slope.

Compaction of Fills

All of the embankment material except the rock was compacted to 90 per cent of standard compaction by sheepsfoot rollers. The specifications on compaction called for the embankment material to be spread in uniform layers the full width of the embankment, not more than 8 in. thick when in loose condition, and to be thoroughly compacted before the next layer was started. The specifications further stated that "when in the opinion of the engineers, sufficient moisture does not exist in the material excavated to provide thorough binding under compaction, a sufficient amount of water shall be added and uniformly mixed with the soil before it is rolled or tamped to insure thorough bonding during the compaction process. Any excess amount of water shall be permitted to dry to a moisture content which will allow acceptable compaction before being compacted into the embankments. Compaction is to be such as to insure that all soils are uniformly compacted to a density equal to or greater than 90 per cent of standard compaction for each soil at its optimum moisture content." In some cases when the material was too wet for compaction in the embankments, delay was avoided by securing dry material and mixing with the wet to secure the proper moisture content.

Embankments made from rock excavation were not compacted with sheepsfoot rollers but were deposited in two-foot layers and compacted by the passage of grading equipment. In addition, bulldozers and blades were used to fill in the voids and prevent the nesting of groups of large boulders.

The specifications also provided that "in crossing bog

A Northbound "Rocket" Passing Through One of the Layer Rock Cuts. Note the Bench-Type of Excavation, Leaving Limestone Cap Rock Over Underlying Strata of Shale

or swamp land of unsound bottom, excavation of unstable material to solid bottom will be required." Very little bog was encountered on the line, however, except in crossing the old channel of Grand river. Special precautions were taken in constructing the embankments in the Grand River bottoms to protect them against future scour during periods of high water. The fills at both ends of the new bridge were composed mostly of rock from the rock cuts nearby. In addition the benches or bermes along the sides of this fill were made of rock excavation and before the enbankment was placed, a trench about 10 ft. wide and 6 to 8 ft. deep was dug in the natural soil along the toe of slope of the new embankment and filled with rock to prevent undercutting of the new fill.

The contracts specified that the work was to be completed by September 1, 1942, and because speed was essential, the contractors moved in as quickly as possible with a large amount of modern grading equipment, starting work at several points on the line. The equipment used by each contractor was as follows:

George W. Condon Company

- 2—Caterpillar Diesel D8 tractors with 26-yd. LeTourneau Carryall scrapers
- 1—2½-yd. shovel
- 1—2-yd. dragline
- 3—Air compressors
- 5—Jackhammers
- 4—Wagon drills
- 6—12-yd. Euclid trucks
- 1—Motor patrol blade
- 1—Tractor and bulldozer

Peter Kiewit Sons Company

- 1—2½-yd. shovel
- 6—13-yd. Euclid center-dump trucks
- 3—Motor patrol blades
- 1—Tractor with bulldozer and sheepsfoot roller
- 1—⅜-yd. dragline
- 1—Elevating grader
- 5—13-yd. Tournapulls
- 3—Pusher tractors
- 1—Tractor and sheepsfoot roller
- 1—Tractor and bulldozer
- 3—26-yd. LeTourneau Carryall scrapers

Frank Eblen

- 6—DW 10 Caterpillar tractors with 20-yd. LaPlant-Choate CW 10 Carrimor scrapers
- 1—D7 Caterpillar tractor with a 20-yd. LaPlant-Choate CW 10 Carrimor scraper
- 2—Tractors with bulldozers
- 1—Motor patrol blade
- 2—Push tractors
- 2—Sheepsfoot rollers
- 1—Blade

Grading work was frequently delayed because of more than normal rainfall during the year, which made the excavated material temporarily unsuitable for compaction. The railroad originally planned to install subdrainage in all earth cuts, using perforated corrugated pipe. This work, however, has been postponed until after the war.

The bridge work consisted of the construction of three steel bridges, one crossing Grand river and two crossing Wildcat creek, and seven overhead highway bridges. The steel bridges were designed for Coopers E-72 loading. The Grand River bridge has a center deck truss span 200 ft. long and a 90-ft. deck plate girder approach span on each end, with a substructure of reinforced concrete piers and bank block abutments. The piers are founded on rock and the bank block abutments are supported on steel Monotube piling.

The southernmost bridge over Wildcat creek has an 80-ft. deck plate girder center span with a 40-ft. WF. beam approach span on each end. The substructure is similar to that of the Grand River bridge, and is supported on Monotube piling. The Upper Wildcat Creek bridge, which also crosses over U. S. Highway No. 65, consists of one 90-ft., one 70-ft. and three 57-ft. deck plate girder spans with a similar substructure. As previously explained, the steel for these bridges was ordered months before Pearl Harbor and was delivered well in advance of the date needed.

Construction of Steel Bridges

The contracts for all of the bridge work and the construction of the concrete culverts was awarded to Alexander and Repass, Des Moines, Iowa. A separate contract for furnishing and installing corrugated metal culvert pipes was awarded the Armco Railroad Sales Company, Middletown, Ohio. Because of the speed with which the line was to be constructed, it was necessary to begin work immediately laying the pipe and constructing the concrete culverts. At the same time work was begun on the substructures for the bridges.

The steel girders, beams, etc., were delivered well in advance, and were unloaded at Princeton to release the cars. When the grading was completed and the rail laid to the (northernmost) Wildcat bridge, the girders were unloaded on the embankment at the end of the bridge and were then pulled out into position on falsework, using line, block and tackle and a winch, after which, they were lowered onto cribbing set on the piers and abutments and packed down in place. This superstructure was erected by the railway steel bridge gangs. When Upper Wildcat bridge was completed, the rail was laid to the (southernmost) Wildcat bridge and the same procedure repeated at that bridge by the contractors. Finally, the rail was laid to both ends of the Grand River bridge and the approach spans at this bridge were placed in the same manner.

The 200-ft. truss span of Grand River bridge was assembled in place on the piers and on thre erection bents, starting from the south end and using a crane to lift the steel in place.

Overhead Highway Bridges

There are three main highway crossings on the new line. U. S. Highway No. 65 crosses twice, once under the track at Upper Wildcat Creek bridge and again on an overhead bridge about 6¾ miles north of Princeton. While this overhead bridge would normally be built of reinforced concrete for a highway of this class, it is planned to relocate the highway after the war, continuing it northward along the west side of the track, so that this bridge will then serve only a county road.

The other main highway crossing is that of Missouri Highway No. 4 about ½-mile north of Princeton. It was planned to construct a permanent overhead bridge of reinforced concrete at this location, but due to the difficulty of securing reinforcing bars for such construction it was decided to construct an overhead creosoted timber bridge.

The overhead highway bridges are all 20 ft. wide and vary in length from 108 ft. to 156 ft. They are of creosoted timber construction throughout, with the exception of one girder span over the main and passing

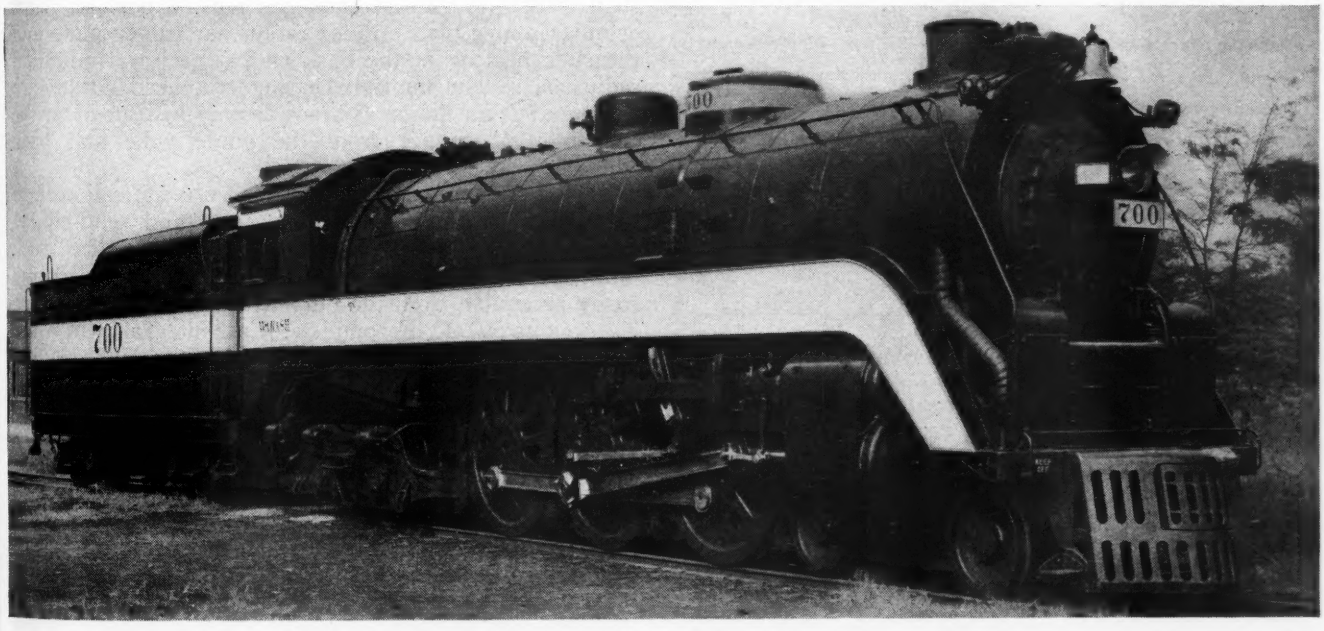
(Continued on page 639)

Wabash Rebuilds 3-Cylinder Steam Locomotive at Decatur Shops

First of five locomotives is converted from 2-8-2 to a modern 4-6-4 type adapted for hauling high-speed trains in either passenger or freight service

FOR some time the Wabash has felt the need for more powerful passenger locomotives which can be interchanged with fast-freight power. During 1925, 50 heavy 2-8-2 freight locomotives were built for the Wabash by the American Locomotive Company. Forty-five of these locomotives were of the two-cylinder type and the other five were of the three-cylinder type. These five locomotives, Nos. 2600 to 2604, inclusive, were operated in fast-freight service between St. Louis and Chicago. Business was at such low ebb during depression years that most of the heavy Mikado locomotives were set aside and performed no service for several years. They were, however, given general repairs and gradually returned to service with the increasing business due to war-time conditions, with the exception of the three-cylinder locomotives which were not designed for the increased speed now required.

The boilers of the three-cylinder locomotives were in good condition and have a steam generating capacity 48 per cent greater than the existing Wabash class J-1 Pacific-type passenger power. They are fitted with 45-unit Type A superheaters and have 40-in. combustion chambers. It was decided that, as they are not adaptable to present needs, they should be re-



4-6-4 Type Locomotive Recently Turned Out at Decatur Shops

Original Wabash K-5 Three-Cylinder Locomotive Built in 1925 by the American Locomotive Company

Principal Dimensions of the New Wabash Class P-1 Locomotive Compared with a K-5 (3-cylinder) and a J-1 (4-6-2) Passenger Locomotive

	P-1	K-5	J-1
Type	4-6-4	2-8-2	4-6-2
Boiler pressure, lb.	220	210	215
Cylinders, diameter and stroke, in.	26 x 28	2-23 x 32 1-23 x 28	24 x 26
Diameters of drivers, in.	80	64	74
Tractive force, lb.	44,200	67,869	36,984
Factor of adhesion	4.44	3.76	4.20
Total weight of engine, lb.	374,690	340,490	248,840
Weight of drivers, lb.	196,390	251,215	155,140
Wheel base, engine, ft.-in.	40—7	39—1	34—0
Wheel base, engine and tender, ft.-in.	75—5½	73—9½	66—5⅞
Overall length, ft.-in.	87—5	83—10½	76—7⅝
Tender capacity:			
Coal, tons	16	18	11½
Water, gals.	12,000	10,000	8,800
Boiler dia. 1st. course inside, in.	88	88	68⅝
Firebox length, inside, in.	121⅜	121⅜	108⅛
Firebox width, inside, in.	84¼	84¼	84¼
Grate areas, sq. ft.	70.9	70.9	63
Heating surface, total evaporative, sq. ft.	4,225	4,225	3,310
Heating surface, superheater, sq. ft.	1,051	1,051	740
Heating surface, total equivalent, sq. ft.	5,801	5,801	4,420
Piston valve diameter, in.	12	12	12
Valve travel, in.	8	6½	6½

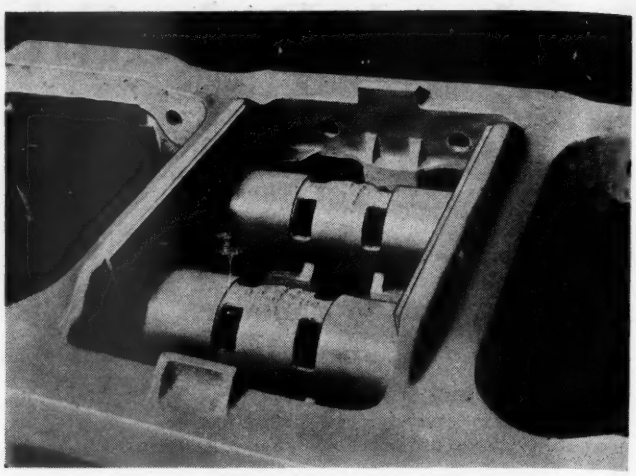
New Materials and Equipment on the P-1 Locomotive Not on the Original K-5 Locomotive

Locomotive bed frame, engine truck, trailer truck, Boxpok driving—wheel centers, swing coupler pilot	General Steel Castings Corporation, Eddystone, Pa.
Roller bearings, all locomotive wheels	Timken Roller Bearing Company, Canton, Ohio
Needle bearings, valve motion	Pilliod Company, New York
Feedwater heater 4½ S.A.	Worthington Pump and Machinery Corporation, Harrison, N. J.
Mechanical lubricators	Detroit Lubricator Company, Detroit, Mich.
Stoker, H.D.	The Standard Stoker Company, Inc., New York
Air brakes, No. 8 ET	Westinghouse Air Brake Company, Wilmerding, Pa.
Radial buffer, Type E2	Franklin Railway Supply Company, Inc., New York
Foameter	Electro-Chemical Engineering Corporation, Chicago
Cylinder protection valves	The Prime Manufacturing Company, Milwaukee, Wis.
Grates, 12-in. Tuyere type	Hulson Grate Company, Keokuk, Ia.
Speed recorder	Chicago Pneumatic Tool Company, Chicago
Cast air radiation elements	Wilson Engineering Corporation, Chicago
Injector, Type S.R.	William Sellers & Co., Inc., Philadelphia, Pa.
Cylinder packing	The Locomotive Finished Material Company, Atchison, Kan.
Driver brake beams—Widdicombe	Sivyer Steel Casting Co., Milwaukee, Wis.

constructed into 4-6-4 type locomotives, usable in heavy fast passenger and in fast freight service, by applying the boiler and cab to a new locomotive bed casting and modernizing, as to details and economy appliances.

The original tender of the three-cylinder locomotive is used, but with water capacity increased from 10,000 to 12,000 gal. by adding 16 in. of water space to the top of the tank and by removing tool and supply boxes from the front water legs.

The drivers are 80 in. in diameter as compared with 64 in. for the old locomotive and 74 in. for the class J-1

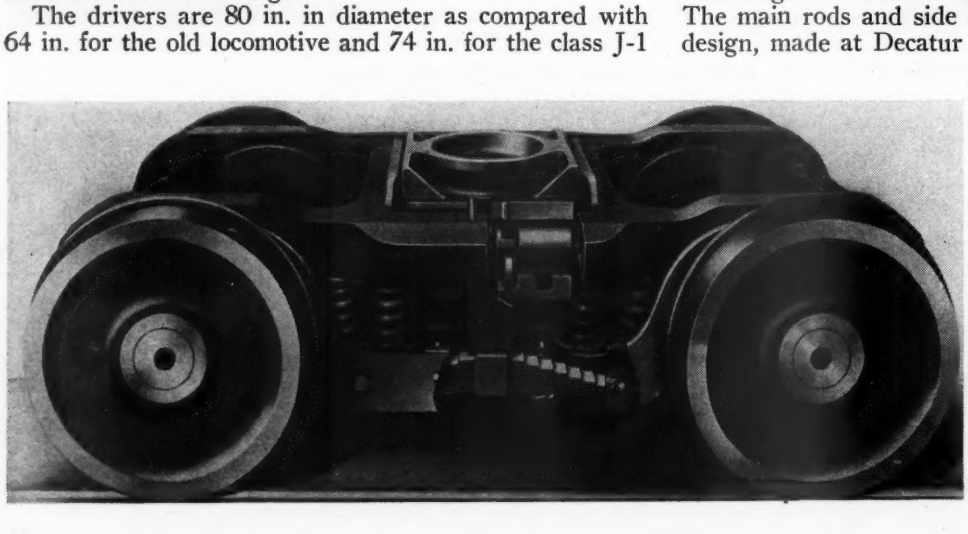


Roller Centering Device of the Engine Truck

passenger locomotive; tractive force, 44,200 lb., against 36,984 lb. for the class J-1. The Walschaert valve gears are used, with 12-in. piston valves, 8-in. valve travel, and McGill needle bearings for link block, link trunnions, link foot and combination lever bearings. Roller bearings are used for all drivers, and for engine and trailer trucks. Two 32-pint mechanical lubricators are installed, one using valve oil for main valves, cylinders, feed-water heater and guides; the other using car oil to lubricate truck pedestals, shoe and wedge faces, valve-stem crosshead guides, equalizer pins, expansion pads, cylinder center plate, trailer radius-bar center plate and the slide bearing at the back end of each valve-motion radius bar. The multiple-bearing crosshead guides are supported from the cross-brace casting instead of in the conventional manner from the guide yoke and back cylinder head.

The engine truck is of special design using coil springs that carry 70 per cent of the weight and semi-elliptic springs carrying the other 30 per cent. Trailer truck brakes are used, with the brake cylinders and rigging easily accessible from the outside. The cast-steel engine bed weighs 59,000 lb. complete. Cast integral with it are the cylinders and back cylinder heads, with high cylinder saddle and inside steam pipes, and the main air reservoir. There are integral brackets at the front for the air compressor and feedwater-heater hot-water pump, and a bracket at the rear on the left side for the stoker engine.

One sliding boiler support is placed between the cylinders and the rear expansion pad. This incorporates box-type welded construction and also serves as a power-reverse-gear bracket and speedometer drive-wheel bracket. The main rods and side rods are of alloy steel, railroad design, made at Decatur shops. Valve-motion parts are



Arrangement of the Springs and the Roller Centering Device on the Four-Wheel Engine Truck

low carbon steel, also manufactured at the railroad company shops.

The main wheels are cross-counterbalanced with separate primary and secondary balances, the weights being calculated with due consideration to the different effects of the right and left eccentric cranks and rods. The main wheels carry 120 lb. overbalance. The front and back wheels are statically balanced for rotating weights and carry 150 lb. overbalance, each. The total overbalance per side is 420 lb. and amounts to 28 per cent of the reciprocating weights. The dynamic augment at the diameter speed of 80 m.p.h. is 5,400 lb. for the main wheels and 6,700 lb. for the front and back wheels.

The locomotive is designed to operate on maximum curves of 20 deg., or 288 ft. radius. One thing particularly stressed in the design has been the provision of well-rounded and streamlined steam and exhaust passages. The latter are unusually liberal in size and average 14 per cent of the cylinder area in all sections between the main valves and the exhaust-stand base. A Master Mechanic's front end is installed, with Goodfellow nozzle and cylindrical box-type spark arrester.

The body of the locomotive and tender, driving wheels and running gear are painted a deep blue. There is a 24-in. skirt, the full length of the running board and a 24-in. wide band continuing back over the cab and tender. The skirt and band are painted aluminum white and edged, at top and bottom, with a 1-in. red stripe. The lettering and numbering are in blue. Rods and valve-motion parts are polished.

This locomotive will be used in passenger service on the heavy night trains of the Wabash between St. Louis, Mo., and Detroit, Mich., on fast-passenger trains between St. Louis and Kansas City, Mo., on troop trains, and to a considerable extent in fast-freight service.

R. I. Line Relocation Speeds War Traffic

(Continued from page 636)

track just north of the Princeton station. All the bridges are designed for H-15 loading except Highway No. 4 bridge which was designed for H-20 loading. All of the bridges extend over single track except the one with the steel span in the center at Princeton. The center spans on the single track bridges are 18 ft. 6 in. long, center to center of bents. The remaining spans are 17 ft. long, except on Highway No. 4 bridge where they vary from 12 to 14 ft. in length. The bents have 5 piles each except that Highway No. 4 bridge has 6-pile bents. The caps are 12-in. by 14-in. Eleven stringers, 8-in. by 18-in., support the deck on the spans over the track and 11 stringers, 8-in. by 16-in., support the deck on the other panels. The decking is of 4-in. by 10-in. timber and on U. S. 65 and Highway No. 4 bridges, which are subjected to heavy traffic, a top mastic wearing surface was added.

It is of interest to note that the new line has only three grade crossings, one of which, within the town of Mercer, existed on the old line, as compared to 12 grade crossings on the old route. Also of interest is the overhead highway bridge at Princeton. Second-hand turntable girders which were converted into bridge girders were used for the center span of this bridge. The cost of converting the turntable girders into a bridge span, which included fabrication of a floor system, with new steel laterals, stringers and cross bracing, was nearly as expensive as the purchase of a new steel span, but the second-hand turntable girders were used to help conserve steel for war purposes.

The new line was laid with 39-ft., 112-lb. RE-section controlled-cooled rail, with 24-in., four-hole, toeless joint bars, 7½-in. by 11-in. double-shoulder tie plates, and with sizes 4 and 5 ties, 8½ ft. long. Oak ties were used on the curves and gum ties on the tangents. The rail was spiked with four six-inch spikes per tie and six anti-creepers were applied on each rail. Two additional anti-creepers per rail length were applied several months later. In places where the rail exhibited a tendency to run in one direction, the additional anti-creepers were applied, in a manner to check this movement; otherwise they were applied to prevent movement in either direction.

A gang of 50-60 laborers, with an assistant road-master and two extra gang foremen in charge, was used to lay the rail. The ties and track fastenings were distributed ahead by trucks. The rail was laid with an American Eagle crane operating on the track immediately ahead of a rail-laying train, which consisted of three flat car loads of rail on the head end, a fourth flat car on which a Burro crane operated, a locomotive and a caboose in the order named. The flat cars loaded with rail were equipped with rollers on each side. The Burro crane unloaded the third flat car first, placing the rails on the rollers on each side, from which point they were pushed ahead, picked up by the American Eagle crane and set on the ties. When the third flat car was unloaded, the Burro crane was moved forward onto that car, repeating the process with the second carload of rail, etc. While the rail laying was being completed, new color-light automatic block signals were installed.

The new track was given an eight-inch lift on burnt mine shale, later followed by a light running surface on the same material. This material, which forms an excellent subgrade on clay soil, will be used for about a year, after which the track will be skeletonized and surfaced on chatt ballast from the lead mines near Joplin, Mo., and Picher, Okla.

The line was placed in operation on October 7, 1942, only about 5 weeks after the date originally scheduled for completion, a remarkable achievement in view of the war-time conditions which had developed in regard to materials, repair parts, labor replacements and excessively rainy weather. For a time, the old line was left in place as a second main track for westbound trains, but it was finally removed in December, 1942, to furnish second-hand rail for a rail relay program.

Operation over this important district on the Rock Island has been greatly improved as a result of the new line. Its large locomotives of the 5,000 class (4-8-4), used for heavy freight service, can now haul more than 5,000 tons eastbound up Mercer Hill, whereas these locomotives formerly required the help of a pusher locomotive with a train of 3,000 tons. This improvement has permitted the release of a number of locomotives to other points on the system and thereby has greatly helped this road haul its share of the record-breaking war traffic. In addition, traffic has been greatly speeded up over this section of the line and delays at Trenton for splitting trains or adding booster engines to eastbound freight trains have been greatly reduced.

The construction of this line was under the general direction of W. H. Hillis, operating officer of the Rock Island, F. W. Thompson, chief engineer, and H. T. Livingston, engineer of bridges, and under the immediate supervision of W. B. Throckmorton, resident engineer.

C. T. C. Installed on N. C. & St. L.

Forty-one miles of single track between Atlanta, Ga. and Cartersville handles up to 65 trains daily

THE Nashville, Chattanooga & St. Louis has recently completed the installation of centralized traffic control on 2 miles of double track and 41 miles of single track between Hills Park (Atlanta) and Junta interlocking at Cartersvilla, Ga. This territory handles from 50 to 65 trains daily, and the centralized traffic control has materially increased track capacity and reduced train delays. The freight yards of the N. C. & St. L. are located at Hills Park which is about 5 miles north of the Union Station in Atlanta. Double track extends from Atlanta to Bolton, which is 2 miles north of the north end of the Hills Park yard. From Bolton, single track extends 41 miles north to Junta interlocking at Cartersville.

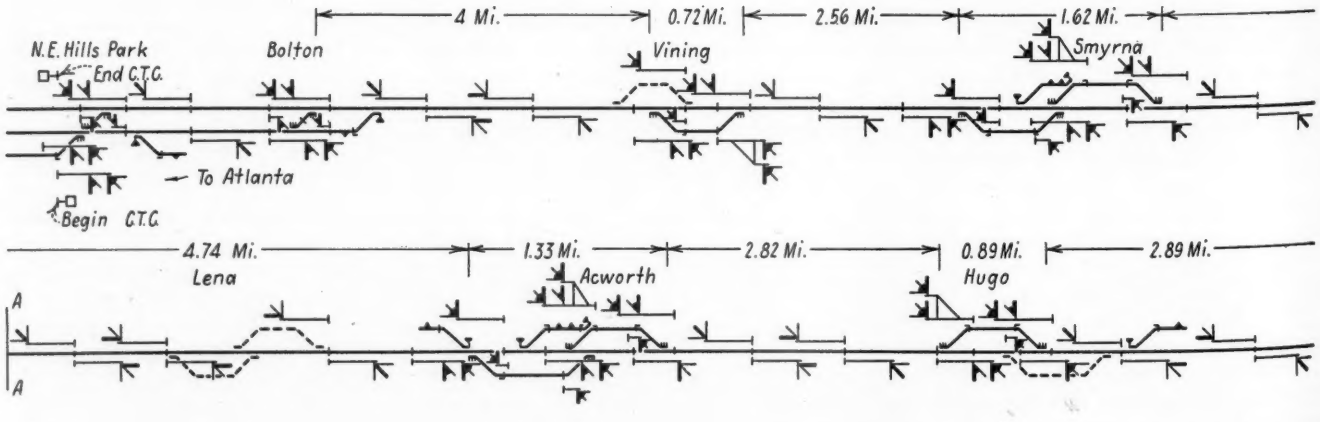
The Dixie Limited Leaving the South End of the C. T. C. Territory Near the North End of Hills Park Yard

This section of country is mountainous. The railroad grade is rolling, and ranges up to 0.6 per cent in most instances, with a few short sections of 1.0 per cent maximum. The line is very crooked, a total of 175 curves being included in the 43 miles between Hills Park and Junta interlocking. About 48 of these curves range from 5 to 6 deg., and 4 curves range from 6 deg. to 6 deg. 11 min., which is the maximum. On account of the grades and curvature, the maximum permissible speeds of trains are limited to 45 m.p.h. for passenger and 40 m.p.h. for freight trains. The speed is restricted to 10 m.p.h. on the bridges over the Chattahoochee river just north of Bolton, and over the Etowah river just south of Cartersville. As a result of these various natural limitations of speed, the overall speed of fast freight trains is about 33 m.p.h., and of through non-stop passenger trains about 37 to 42 m.p.h.

The 43-mile territory between Hills Park and Cartersville is a portion of the main line between Nashville, Tenn. and Atlanta, Ga., and is used also by trains of the Louisville & Nashville as a portion of its route between Atlanta, Ga., and Cincinnati, Ohio, via Knoxville, Tenn., the L. & N. having its own line from Cartersville northward to Cincinnati. The Louisville & Nashville also has a branch line that extends from Marietta via Etowah, Tenn., to Blue Ridge, Ga., and trains of this branch use the N. C. & St. L. between Marietta and Atlanta.

Up to 60 or More Trains Daily

The schedules include three N. C. & St. L. and two L. & N. passenger trains each way daily between Atlanta and Cartersville, in addition to one L. & N. Blue Ridge branch passenger train in each direction



Track and Signal Layout of the Centralized Traffic

daily between Marietta and Atlanta. Three fast freight trains are scheduled in each direction daily, and a local freight is operated Monday, Wednesday and Friday northbound, and Tuesday, Thursday and Saturday southbound. Numerous extra trains are operated as required so that for several months the total number of train movements daily has ranged from 50 up to 60 and, in some instances, up to 65 in a 24-hour period.

Layout of Sidings

Prior to the recent changes, lap siding layouts were in service at eight stations, Emerson, Hugo, Acworth, Lena, Kennesaw, Elizabeth, Smyrna, and Vinings, and single sidings were in service at Noonday and at Rosewood. Based on economic studies and experience that fewer sidings are required with C. T. C., the program included the removal of the single siding at Noonday, the entire lap siding layout at Lena, and one siding of the lap layouts at Emerson and at Hugo. As a result of these changes, the sidings now in service for passing and meeting trains include single sidings at Emerson, Hugo, Rosewood and Vining, and lap siding layouts at Acworth, Kennesaw, Elizabeth and Smyrna. As a part of the C. T. C. project, power switch machines were installed at these 24 siding switches, as well as at the crossover at the end of double track at Bolton, and at the crossover and yard switch at the north end of the yard at Hills Park, a total of 29 power switches.

The south end of the C. T. C. territory is just south of the switch at the north end of the yard at Hills Park, and the C. T. C. control machine for the entire territory is located in a new two-story fire-proof building at this location. At Cartersville, the C. T. C. ends at the south limits of the Junta interlocking, an electro-mechanical plant which includes the switches and crossovers at the junction between the N. C. & St. L. and the L. & N.

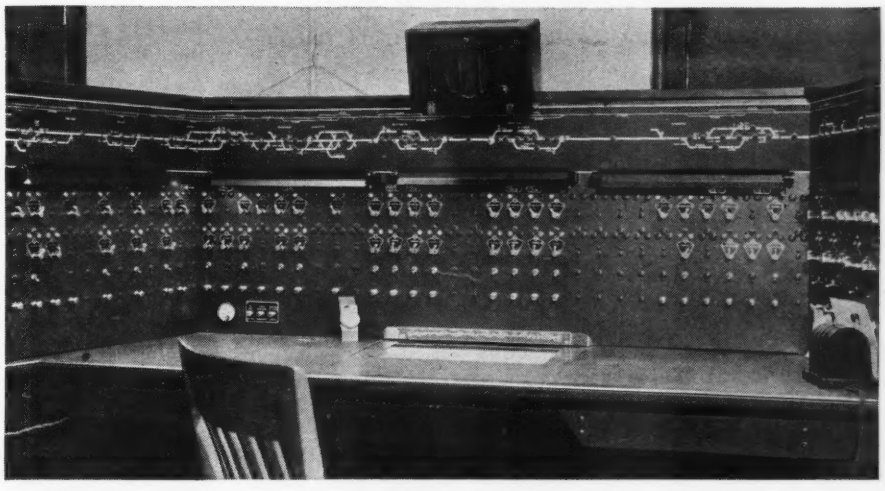
Signaling Arrangements

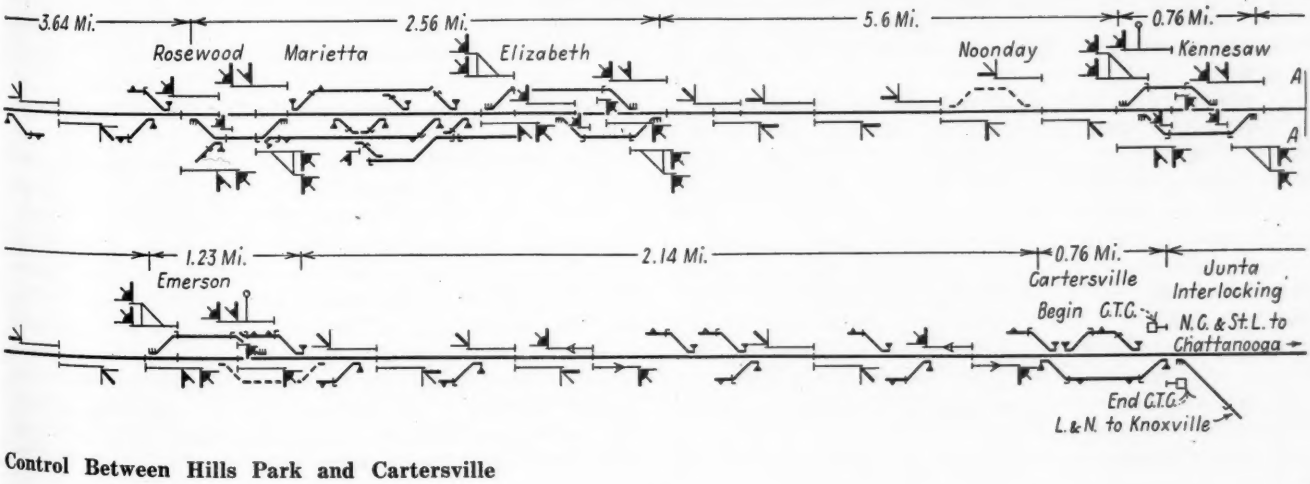
Color-light automatic block signaling was installed on this territory in 1925. Within recent years many of the signals were relocated to lengthen the braking distance to comply with increased train speeds. Further changes in signal locations were, of course, required on account of the removal of sidings when changing over to C. T. C. At the ends of the sidings, the signals were located as required for directing train movements under C. T. C. control, the final signaling arrangements being as shown in the accompanying diagram. In making these changes, the old three-unit color-light heads were reused, but new two-unit color-light heads were purchased for use as lower arms on station-entering signals. New three-aspect dwarfs were installed as leave-siding signals at some locations, while at other places, where clearance was not available between tracks for the main-line station-departure signal, a bracket mast was installed to support high signals for main line and leave-siding signals.

In addition to the 29 power-operated switches, there are 27 main-line switches leading to house tracks and spurs which are operated by hand-throw stands. In some instances, house tracks or storage tracks are connected by hand-throw switches to passing tracks, as for example at Smyrna, a total of five such hand-throw switches being in service on the territory. As a part of the project, an electric lock, controlled by the C. T. C. machine, was installed at each of these 27 main line and 5 side-track hand-throw switches, thus making a total of 32 electric locks.

The C. T. C. control machine is located on the second

The Centralized Traffic Control Machine Includes Lever for Switches, Signals and Electric Switch Locks





Control Between Hills Park and Cartersville

floor of a new two-story fire-proof building on the east side of the track near the crossover and yard switch at the north end of the freight yard at Hills Park. This control machine has 25 levers for the control of 4 crossovers and 21 single switches; 31 levers for the control of 34 two-unit signals and 36 one-unit signals; and 11 levers for the control of 32 electric locks on hand-throw switch stands.

Automatic time locking is provided so that, if a semi-automatic signal has been cleared and is then taken away by lever control, a time interval must expire befor the switch or switches involved can be operated, or an opposing or conflicting signal cleared. The time interval is measured automatically by a time element relay, the interval in each instance being long enough for a train to stop short of the switch.

Details of Track Diagram

The illuminated track diagram includes red lamps which are automatically lighted when corresponding sections of main track are occupied. Indication lamps are provided on the sections of diagram which represent the passing tracks. When a train enters such a track, the train controller throws a small toggle switch on the panel which causes the track-occupancy lamp for the corresponding passing track to be lighted, thus serving as a reminder of the location of this train until it is directed to leave, at which time he returns the toggle switch to the normal position, thus extinguishing the lamp.

The controls are transmitted from the C. T. C. machine to the field station, and indication controls are returned by means of the Union Switch & Signal Company time code system, using two wires from the machine to the remote end of the territory, 30 field stations being included in the systems.

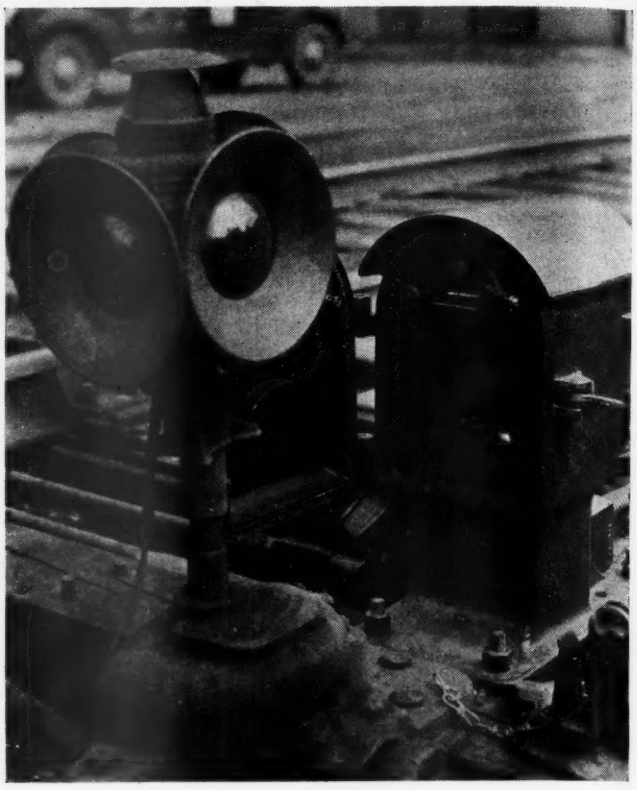
Special Controls of Electric Locks

In addition to controlling the normal arrangement of a power switch and semi-automatic signals, certain of the field stations also handle the controls for certain electric locks on hand-throw switches, the controls from the respective field stations to the locks being on separate line wire circuits. Thus all of the electric locks are controlled directly by corresponding levers on the C. T. C. machine.

Where two or more electric locks are located close together, so that the same control limits are involved locally in the field with respect to signal protection, these two or more locks may be controlled by a single lever on the C. T. C. machine. This accounts for the fact that a total of 32 locks are controlled by a total of 11 levers.

A telephone is located in a booth in the vicinity of each passing track switch, as well as near each of the switches equipped with an electric lock. When a train is to make a movement which requires that an electric lock must be released, the conductor uses one of these telephones to communicate with the train controller. If conditions are such that the proposed train movement is to be made, the train controller sends out a C. T. C. line code control, but only after signals protecting such switch display the most restrictive indications the conditions require, and if the train is to enter a siding, in addition, a two-minute time interval must expire before the lock is released.

If circumstances with respect to local controls are



Each Main Line Hand Throw Switch Is Equipped with an Electric Lock

such that a lock cannot be released by control from the C. T. C. machine, the train controller can give permission, by telephone, for the conductor to break a seal on the front of the lock, which permits a button to be pushed, thus completing a circuit which energizes the lock. When such a seal is broken, the dispatcher notifies the maintainer to install a new seal. A record is maintained of the serial numbers of these seals, so that strict supervision is maintained of the seals broken and replaced.

The telephones in the booths at the various switches are connected to a separate line circuit which extends to a loud-speaker on the C. T. C. machine. If the dispatcher wants to get in touch with the maintainer or other men who may be in the vicinity of a certain C. T. C. field station, he sets a toggle switch and sends out a control, which causes a call lamp to be lighted on the track side of the corresponding field house. The crews of trains which are standing on sidings or are switching in the vicinity are required to observe the call lamps and, if lighted, to call the dispatcher from the nearest telephone.

Signal Forces Responsible for Construction

This centralized traffic control was planned and constructed by signal forces of the Nashville, Chattanooga & St. Louis, under the direction of E. W. Anderson, signal and telephone engineer. Field work was started with one gang on January 4. Sections ranging from 10 to 15 miles were placed in service when completed, the final section from Emerson to Junta being placed in service on August 14.

The major items of equipment, such as the power switch machines, new relays, C. T. C. control machine, line coding system, etc., were furnished by the Union Switch & Signal Company.

Advisory Boards Gird Themselves for Transportation Crisis

National committee to seek 10 per cent boost in car efficiency. Six per cent increase in freight ton-miles and 15 per cent in passenger-miles forecast

THE formation of a war transportation committee that will have for its goal an increase of 10 per cent in equipment utilization was announced by Joseph B. Eastman, director of the Office of Defense Transportation, at the annual meeting of the National Association of Shippers Advisory Boards at St. Louis, Mo., on October 15. The high point of the meeting was a determination to surmount the difficulties that will confront railroads and shippers during the critical period for war transportation which will arise during the next six months. Subjects discussed included the equipment situation, car efficiency, railroad legislation, the military transportation situation, and the effort of the boards to help solve transportation problems. In addition to the discussion of ways and means to facilitate the movement of traffic, a number of resolutions in support of the railroads were passed. At a luncheon session, the speakers were Mr. Eastman, J. J. Pelley, president of the Association of American Railroads, and J. Monroe Johnson, Interstate Commerce Commissioner.

All officers were re-elected. These include: President, G. H. Shafer, general traffic manager of the Weyerhaeuser Sales Company, St. Paul, Minn.; vice-presidents, W. H. Day, manager of the transportation department of the Boston Chamber of Commerce, and Carl Giessow, director of the traffic bureau of the St. Louis Chamber of Commerce; and secretary, C. J. Goodyear, traffic manager of the Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa.

Eastman Heads Efficiency Committee

The officers of the war transportation efficiency committee, which was formed at a meeting of shippers and representatives of the railroads and the Interstate Commerce Commission in Washington on October 11, are: Chairman, Mr. Eastman; vice-chairman, Mr. Day; and secretary, Edward F. Lacey, executive secretary of the National Industrial Traffic League. Other members are: W. C. Kendall, chairman of the Car Service division of the Association of American Railroads; J. M. Hood, president of the American Short Line Railroad Association; Homer C. King, director of the Bureau of Service of the Interstate Commerce Commission; Henry F. McCarthy, director of the Division of Traffic Movement of the Office of Defense Transportation; John B. Keeler of the National Industrial Traffic League; G. H. Shafer, president of the National Association of Shippers Advisory Boards; and F. A. Doebber, president of the Associated Traffic Clubs of America.

In announcing the formation of the committee, Mr. Eastman said:

"The wartime accomplishments of the transportation industry of the United States and its related enterprises have been nothing short of superlative. Time after time, as the momentum of the war increased, the carriers, together with the shippers and receivers of freight, have been called upon to step up their performance. They have met these challenges well.

"However, the battle is not yet won. The worst, in fact, is yet to come. The next six months will be a critical period for war transportation. For the first time since Pearl Harbor, and in fact for many years, the railroads are going into a winter with no unused capacity. Winter, as everyone in transportation knows, means lowered operating efficiency. There is only one way to meet this situation—that is, through increased utilization of existing equipment and facilities, by tightening up on transportation performance all along the line.

"The committee, let it be emphasized, will not take over the work of existing efficiency groups. These groups have been instrumental in lifting the efficiency of transportation to its present wartime level. and they will be called upon to do still more. I refer particularly to the 650 local car efficiency committees of the 13 regional shippers advisory boards.

"It will be the task of the National committee and the local committees to drive home to the carriers as well as to the shippers and receivers of freight the necessity for even greater efficiency in the use of existing equipment. At bottom, of course, the actual work of getting more freight into cars, of loading them faster and unloading them more promptly and of leaving them clean for the next shipper will rest upon the individual shipper and receiver of freight and his traffic and shipping forces. The job of cutting down on the time spent in switching, of putting the cars through the terminals faster and of speeding up the movements generally will rest with the individual railroad."

The Association of American Railroads estimated an increase of 6 per cent in freight ton-miles and an increase of 15 per cent in passenger-miles for the next 12 months. Mr. Pelley, in an address at the luncheon session, said that—

"To handle such an increase, the railroads now have 40,092 freight cars on order, with 7,791 to be ordered, making a total of 47,883 additional cars. Of this number, 30,618 have been scheduled for production by the War Production Board. There are 1,218 new locomotives on order, with 64 more to be ordered—a total of 1,282. Of this number, 1,122 have been scheduled for production, but, unfortunately, production is falling behind the schedule.

"What, then, are we—and by we I mean not only railroads but also shippers and the government agencies—going to do to meet the anticipated increase in traffic? We are going to tighten up on transportation performance all along the line, and in every detail. We've got to."

Buford Optimistic

Charles H. Buford, vice-president of the A.A.R., in commenting upon the transportation situation, said that the transportation load in this country is rapidly approaching its peak and that for 1944—

"We may reasonably expect an increase of about six per cent in ton-mile, with a movement during next year's peak period not in excess of three per cent above the peak for this year;

I believe that if about 1,200 locomotives and between 40,000 and 50,000 freight cars can be constructed and delivered between October 1, 1943, and October 1, 1944, and if our manpower needs are handled properly and intelligently, the railroad plant will be able to carry the indicated load through the peak period and winter of next year with much less difficulty than will be encountered this year.

"There are those who will probably disagree with these figures, feeling that they are too conservative. But I want to call attention to the fact that a freight car in itself cannot move any business—it takes locomotives and men to move it. Regardless of the number of cars, the movement will be controlled by the available locomotives and manpower. There is room for difference of opinion as to the ability of the railroads to maintain the present low percentage of bad-order cars and locomotives. I am convinced that if the manpower situation gets no worse, the railroads can maintain the present percentage; and if the manpower situation is improved, the railroads can further reduce the percentage of unserviceable cars.

"Even if the railroads are allowed the number of freight cars they need, an improvement in the present turn-around time will be necessary. However, basing my judgment on checks which have been made at various terminals in the United States, I am convinsed that the job will be done under the urge of necessity.

"On the passenger side, there seems little likelihood of getting any substantial amount of new equipment. There are now being constructed 1,200 special troop sleeping cars and 400 special troop kitchen cars which will be devoted exclusively to the movement of armed personnel. It is expected that a large number of these cars will be placed in service by the end of this year, the troop sleeping cars coming out first. All of this equipment should be in service not later than February, 1944. The addition of this equipment will enable the railroads to more nearly provide sleeping accommodations for troops who are now moving long distances in coaches, and it will provide better mess facilities for the troops while en route. It will also release a few head-end cars and probably 600 or 700 coaches that will help the railroads more nearly meet the demands for furlough and other necessary travel."

A Crisis Six Months Long, or Longer

Mr. Eastman, who a week before had expressed the opinion that the next six months would be a critical period for the carriers, said, in a luncheon address, that he was not certain as to the length of the period for it may prove longer. Continuing, he went on to say:

"The year 1941 set a new record for ton-miles of revenue freight carried by the railroads, 1942 beat that record by more than 30 per cent, and 1943 promises to beat the 1942 mark by as much as 15 per cent. The passenger traffic record is even more astounding. It is not surprising, in these circumstances, that the supply of practically every type of freight car is tight or worse. The wonder is that the traffic has been handled at all.

"We can see some alarming conditions in prospect for the carriers. Let me list those which I think are most formidable:

"(1) The coming winter season. Zero weather, snow and ice, storms and floods cut deep into railroad efficiency. I hope and pray that we may have less of these visitations this year than we had last year.

"(2) The manpower shortage. It exists and promises to grow worse. I need not describe it to you. Along with this shortage is the wage problem, and the danger of serious labor disturbances. That problem is not within my province, but I know its difficulties and dangers.

"(3) The special shortages which threaten motor vehicle transportation, including manpower, vehicles, repair parts, gasoline, and last, but by no means least, tires. You may have heard that the rubber problem is solved, but unfortunately the tire problem is something else again, and I assure you that it has not yet been solved. The great help which the railroads have been receiving from the trucks may be curtailed.

"(4) The increasing pressure on the already heavily-taxed Western railroads, as the campaigns in the Pacific develop and gain force and momentum.

"(5) The like increasing pressure on the lines serving the Atlantic ports, with the increasing freedom of movement on the high seas, the growth of the merchant marine, and the development of our European campaigns.

"(6) The growth of traffic in farm products and foods, as we bring all arable land into cultivation and prepare to feed a considerable part of the world as well as ourselves. Already the movement of wheat, corn, flax, rice, soya beans, potatoes, livestock, and other products is taxing the railroads very severely indeed.

"(7) The certainty that there will be no let-up in the movement of coal, petroleum and its products, and ore; that the productive activity of the country has not yet reached its peak; and that the passenger traffic demand will continue to exceed the capacity to transport.

"To reach the goal that has been set will require improvement of both railroad and shipper performance. You can count on O. D. T. and I. C. C. help to the last degree, and I am not forgetting the fact that the Federal Government, through the Army and Navy and other manifestations, is now the biggest shipper of all. I am confident that we shall have the effective co-operation of all these agencies.

"There are other things to be done, and they will not be overlooked. They include the same close watch over routes, with diversions when necessary, in the East and the South as in the West; continued tight supervision over traffic to the ports by the Port Traffic Control committee, so that it will not block and jam; the efficient use of storage facilities to relieve the load on the carriers and on the ports; the use, whenever necessary, not only of freight cars, but of locomotives and passenger cars, regardless of ownership; organization of trainload movements, as in the case of petroleum, or the blocking of cars to avoid reclassifications and other switching operations en route; and the organization of less-than-carload freight shipments so that heavy loading will not congest transfer points or otherwise delay movement. We are also working in co-operation with the War Production Board, the Food Administration, the Solid Fuels Administration, and the great shipping agencies of the Government to curb cross or excessive hauls of commodities to the extent practicable without harm to our industries."

Mr. Johnson in discussing at the luncheon the war transportation efficiency program said, "Ten per cent is a wholesome figure to improve on, in what the American railroads are doing. If you do improve it 10 per cent, you will continue to enjoy some of the comforts of transportation you now have, but no more. If you get only 3 per cent, you are going to make many more sacrifices than you never dreamed of."

Mr. Johnson referred to the reluctance of shippers to give up transportation privileges they have always enjoyed, saying that in several instances it has been necessary to issue service orders to preserve the car supply. He mentioned holding cars for reconsignment, for the taking of samples and for storage.

Legislative Situation Needs Attention

A tax of 25 per cent upon passenger transportation is unreasonable as a sales tax, according to R. V. Fletcher, vice-president of the A.A.R., in a summary of the national legislative situation. He went on to say:

"The Treasury has asked for new legislation which would raise by taxation as much as $10½ billions, in addition to the enormous sums which are now being paid. What the response of Congress will be to this demand no one can predict at this time, although I have some idea that Congress will not approve all the recommendations of the Treasury, embodying as they do demands for huge increases in corporate and individual taxes.

"For example, it has been suggested that the tax on passenger transportation should be increased from 10 per cent to 25 per cent. While the railroads have never opposed a reasonable tax upon transportation, provided it was made applicable to all forms of transportation, as it has been hitherto, it does seem to me that a tax of 25 per cent upon passenger transportation is unreasonable as a sales tax, which it unquestionably is."

Congress is being asked, Mr. Fletcher said, to permit the railroads to set up reserves for deferred maintenance,

with the privilege of deducting the amounts so set up from taxable income. He said further:

"Congress might very well take cognizance of the fact that at the present time the railroads have each year as much as $250,000,000 of deferred maintenance applicable to roadway and structures, not to mention equipment. This sum of money, upon which taxes must be paid at very high rates, does not represent real income. Sooner or later, these maintenance conditions must be corrected and it would be obviously in the public interest if the railroads were permitted to accumulate money which would be spent to restore roadbed and equipment to a condition of normal repair.

"At the present time, the railroads are collecting very large sums of money from the government upon the theory that land grant rates do not apply to shipments of a particular kind. You will remember that the law now provides that land grant rates shall apply only to the movement of military and naval property moving for military and naval and not for civilian uses. Many differences of opinion have arisen as to what constitutes military and naval property and what constitutes military and naval as distinguished from civilian uses. As the statute stands now, the railroads are permitted to make out their bills against the government upon the railroad theory as to what the law means. It is conceivable, however, that five or six years from now, when the general accounting office comes to check all these settlements, it will be held by the departments and by the courts that land grant rates should have applied to much of this traffic, with the result that the railroads will be called upon to refund huge sums of money at a time when they are far from being in ample funds. Of course, the railroads could deduct the amount of those refunds from taxable income for the year in which the refund is made; however, it may well be that there will be little or no taxable income in those post-war years.

"It is, therefore, highly necessary that a law should be passed similar to that which applies in the renegotiation of contracts, under which, if refunds are made to the Government by reason of the land grant provisions, the tax should be recalculated as of the year when the money was received by the railroads and taxes thereon paid by the railroads. Quite obviously this is a perfectly fair proposition, about which Congress should not hesitate."

The continuing increase in freight car requirements which show the War Department's fourth quarter needs of 1943 to be an increase of 50 per cent over the same period of 1942 will make necessary the utmost in car conservation and turn-arounds, Col. William J. Williamson, chief of the Traffic Control Division of the Army Transportation Corps, stated. Continuing he said:

"All the conservation on the part of shippers and consignees in the prompt loading and unloading of cars will be to no avail unless the carriers themselves move these cars with the greatest possible expedition while in their possession. A lengthening of schedules by a few hours over this country would have a tendency to dissipate the entire existing surplus. The War Department supports most vigorously the carriers' position in regard to their need for more manpower, motive power, and equipment.

Fears for Western Carriers

"We feel that the carriers in the Eastern and Southern sections of the country are in a position to adequately care for any increased load that they will be called on to carry but there is considerable doubt as to the ability of the transcontinental lines to handle efficiently all of the freight shipments that are apt to develop. It is hoped, however, that with additional holding yards that have been constructed, the intelligent routing of freight and the maximum use of feeder lines between the Mississippi river and the mountain states that a great deal can be done to assist the carriers in this effort."

In the 662 days that have passed since the Jap attack at Pearl Harbor (to September 30, 1943), Mr. Williamson said, the War Department has shipped the equivalent of 4,000,000 30-ton cars of freight, tanks, trucks, foodstuffs, bombs, shells, armored cars, jeeps, lumber, coal, shoes, clothing, tents, railroad cars, locomotives, rails, steel in sheets, bars and various forms and other commodities too numerous to mention. Continuing he said:

"We have also regulated, as agents of the Office of Defense Transportation, the flow of all lend-lease shipments to our various ports through a control system that has done a truly remarkable job. We do not have any port congestions in the entire country and I see no reason for any under our present system.

"As of October 1, 1943, there were 23,627 cars of freight on wheels at all of the ports, of which the War Department had 7,097. The balance represents cars for our Allies, lend-lease countries and the Navy department. On September 30, the combined ports unloaded a total of 4,082 cars, which included 1,342 cars for the War Department.

"To get a quick picture of what is being accomplished at the ports and how that picture affects all ports as a whole, we determine what 'bank' of cars is on hand daily, always being cognizant of the fact that too small a 'bank' is as dangerous as one that is too large. Therefore, we divide the number of cars on hand by the daily average number unloaded during the previous week. Thus, as of October 1, we had 5.9 days 'bank' on hand, considered as a total, and 4.4 days 'bank' on hand for the War Department. It is believed no one can deny that this is a rather healthy condition.

"Our storage condition at the ports is also in a healthy state and the number of carloads in storage consumes but a small percentage of the aggregate space available. In open storage we had a grand total of 4,616 carloads on October 1, of which the War Department's share was only 1,159 carloads. In covered storage there was a grand total of 4,081 carloads and the War Department's portion was only 174."

Railroads Move 93 Per Cent of Army Freight

The railroads are now moving 93 per cent of all Army freight and express and more than 80 per cent of the armed forces, according to W. C. Kendall, chairman of the Car Service division of the A.A.R. in a radio broadcast made in conjunction with the meeting. During normal times, he said, the railroads carry 60 per cent of America's commercial freight and passenger traffic but now they are handling 70 per cent of it. During the first nine months of 1943 they handled 540,000,000,000 ton-miles and more than 66,000,000,000 passenger-miles. Each day they are handling 1,500,000 people, 2,000,000 tons of coal, 40,000,000 gal. of oil to the East, 4,600 carloads of export freight, twice that amount of supplies to Army and Navy camps and posts, and 800 carloads of steel and steel products from the East to the West for shipbuilding and other war purposes, he said.

The requirements of the Army were described during the broadcast by Col. E. C. R. Lasher, deputy chief, Traffic Control division of the Office of Chief of Transportation of the War Department, who said that the average journey for a soldier was 850 miles during the first 20 months of the war; and that the average movement of a division by rail covers 15,000 men and 6,300 tons of organization equipment and requires 65 trains of 1,350 passenger and freight cars. During the first 20 months, he said, the railroads hauled nearly 100,000,000 tons of freight and express for the Army, or about five times more than they did during the duration of the first war. At the present time, he said, the Government is shipping more than a ton of supplies per man per month to maintain our fighting forces in overseas theaters.

Reports made by representatives of a number of boards showed that car efficiency committees, of which there are now 600, are aiding extensively in bringing about greater utilization of the railroad plant. Said Mr. Giessow:

"In the beginning the efforts of the car efficiency committees were directed primarily to the advance ordering of the proper type of equipment for prompt loading, prompt unloading of

cars on arrival and placement, the heavy loading of cars, the removal of dunnage, blocking and rubbish from cars after unloading and the procurement of a longer week for the loading and unloading of cars. At the time of their organization these seemed to be ample to meet the situation but as the demands for transportation increased, without any substantial addition to power and equipment, it became evident that elimination of practices that tended to consume car-days had to also be reviewed and eliminated where possible.

"Today we find that in addition to the original activities which these committees undertook they have added a great many more, namely, extended acceptance of merchandise shipments trucked from railroad facilities, reduction of intra- and inter-plant movement, regulation of flow of materials to prevent bunching of cars, the exercise of special care in the loading and unloading of heavy shipments to reduce car damage, the elimination, where possible, of light-weighing and re-weighing of cars, the pooling of labor to facilitate loading and unloading of cars, the elimination of tracing to reduce manpower requirements, the immediate furnishing of billing information as a means of eliminating car movement to and from hold-trucks, the establishment of through merchandise cars to eliminate transfer saving man-power, conserving car usage and expediting movement, procurement of priorities for unloading equipment for shippers, personalized studies of individual plant situations designed to free movement and eliminate car detention, increased co-operation from state grain inspection departments, elimination of holding cars out for inspection with direct switching to plant saving placement on hold-tracks and thereby eliminating delays to cars and others."

The committee of the Allegheny board has reduced intra and inter plant movements as much as 50 per cent and has been successful in its efforts to get industry to regulate the flow of materials to plants so as to prevent car accumulation. In the territory of the Atlantic state board, companies have established excellent records for car handling, one having recently released its 5,002 cars during the period of less than two years without an accrual of demurrage against a single car. The Central Western board has brought about a 50 per cent reduction in cars held over 48 hours in the face of an increasing shortage of labor by the regulation of the movement of freight and by the pooling of labor to facilitate loading and unloading. Mr. Goodyear reported:

"One of the grave difficulties experienced in promoting car efficiency has been the refusal or failure of many consignees to unload cars completely and to remove from the cars all traces of bracing, dunnage and debris. All of the regulatory authorities have given consideration to the issuance of orders which would compel consignees to perform up to par in this very important respect, as there is a tremendous loss of car time involved in taking cars to a cleaning track before placing them for another load. No practicable way to cover the situation by peremptory order has, however, been found, and the only perceivable solution is through a program of education by the regional boards.

"One of the factors which has a distinct tendency to clog terminals and delay cars is the failure or refusal of consignees to accept less carload freight on every working day, particularly in the larger cities. In some of these cities the list of consignees who refuse to accept freight on Saturdays looks like the telephone directory. The result of this refusal is that the freight which should be delivered on Saturday remains in the freight houses or on the trucks over the weekend, and when Monday morning's arrivals are placed in the freight house, there is no space available, either on the platforms or on trucks, for the incoming freight, resulting in serious delays in unloading cars.

Another matter that has given a good deal of concern is the very extensive practice of many shippers to have cars re-light-weighed. The records of the weighing bureaus indicate that hundreds of thousands of cars are reweighed by request of shippers and consignees, causing a very heavy drain on the motive power of the carriers, and wasting millions of car days."

Resolutions

A number of resolutions were passed by the association. One urged Congress to enact such amendments to the International Revenue Code as will enable the carriers effectively to set up reserves "for the post-war restoration of the service life of their plant and equipment now being so rapidly 'run out' under the tremendous pressure of wartime traffic, without an adequate opportunity for current replacement." The resolution stated further:

"Deferment in maintenance will have to be made up after the war if the carriers are to be kept adequate and equal to the needs of national commerce. It is, to all intents and purposes, a current expense of operation which, because of war conditions, cannot be made currently. It should be so treated, under the carefully safeguarded conditions made possible by the Interstate Commerce Commission's supervision of carrier accounts, in all cases where carriers now set aside reserves, in cash or government securities, to be spent after the war for restoration of plant and equipment. The amount of such reserves, which are in reality an expense, should not be subject to income tax as if they were a profit.

"Through such an enlightened treatment in the internal revenue laws of a recognized situation, there should be created now a reserves which, in the future, would help to do two things admittedly desirable: To provide employment in the difficult adjustment period after the war, and to restore the plant and equipment of the carriers now being used up in essential war service."

Another urged repeal of land grant rates because—

"The present law discriminates between shippers located on land grant railroads and those on other railroads in bidding on government business. Producers located on non-land grant railroads are at a serious disadvantage as compared with producers located on land grant roads. The present law is an unnecessary source of added uncertainty and confusion. No one knows just what the land grant deductions amount to in any particular case until after the shipments have been made. Bidders located on land grant railroads have difficulty in adjusting their bids, while those on non-land grant railroads, bidding in competition with producers on land-grant roads, have even greater difficulty in knowing the competition they have to meet.

"And, finally, the present law is a source of discrimination as between government and commercial shipments which should be removed."

The "Absolute State" Is Our Real Enemy, and It Can Be "Democratic" in Form

"Many of us have not yet recognized the fundamental evil to the correction of which the principles of the Atlantic Charter are supposed to be directed. . . . That fundamental evil is *totalitarianism*—the *Absolute State*. . . .

"We continually bandy such words as 'fascism,' 'dictatorship,' 'democracy' and 'freedom,' but there is practically no sign that we recognize the fact that 'democracy' and 'freedom' are *not* synonymous, that the real incompatibility is between 'freedom' and the 'Absolute State' and that the 'Absolute State' can exist perfectly well under 'democratic forms.' Not only is there no sign of such recognition but many signs are apparent that many of our citizens conceive 'democracy' in a 'totalitarian' sense in that they believe in unrestricted 'majority rule.' If one may judge a group by its utterances, its emphases, and by its reticences, one must conclude that many of our 'liberals' so conceive 'democracy' for which they loudly plead and for which they profess to fight.

"The Axis is our enemy in the war; the 'Absolute State' is our enemy in the peace—our enemy in any guise, and it can assume all guises."

—Thomas F. Woodlock in the Wall Street Journal

The Nation Looks to Its Railways For More Ferrous Scrap

Nine regional meetings comprising second National Conference are being sponsored by WPB to increase production of scrap

WITH the armed forces of the United Nations on the offensive in all theatres of war, and with some notable successes in establishing bridge-heads in the Pacific, Africa, Sicily and Italy, the need for increased production of munitions and war machines is imperative; production goals for 1944 must be from 20 per cent to 25 per cent greater than 1943; Naval and merchant ship programs for 1944 must be increased 20 per cent above the 1943 level; hence, it devolves upon the American railways as the greatest producers of ferrous scrap, to exert every effort to maintain their production of vital scrap, so essential in furnishing "the tools to finish the job" within the fortress of Europe and the reaches of the Pacific, railway officers were told in the Cleveland and Chicago meetings of the second National Railroad Conference held in those cities on October 13 and 15, respectively.

Despite the paradox imposed by the severe curtailment and restriction of critical railway materials and equipment, the adoption of ever-broadening material conservation measures, and the intensive drive for railway scrap during the last fifteen months, the initial meetings of the series find top-flight railway executives, officers of the operating, purchasing, stores, mechanical and engineering departments, and railway salvage directors pledging their complete co-operation in the new drive designed to meet the national scrap quota. Assurances of active co-operation also has been received from representatives of the railway labor organizations.

The Cleveland and Chicago meetings were two of a series of five, sponsored by the Railroad Unit of the Industrial Branch of the Salvage division of the War Production Board, and held during the last two weeks, at New York on October 11, at Cleveland, Ohio, on October 13, at Chicago on October 15, at Kansas City, Mo., on October 18, at Houston, Texas, on October 20, and at Atlanta, Ga., on October 22. The complete series will include nine meetings, with additional conferences scheduled at Denver, Colo., on November 2, at San Francisco, Calif., on November 5, and at Seattle, Wash., on November 8.

The Chicago meeting was attended by 64 representatives of 37 roads and the Cleveland session by 35 representatives of 21 railways, including executives, purchasing, stores, mechanical, operating and engineering officers and salvage directors, as well as local and national representatives of the War Production Board, the Office of Defense Transportation, the Army and Navy, together with representatives of the Association of American Railroads, the American Short Line Railroad Association, the Brotherhood of Railroad Trainmen, the Brotherhood of Locomotive Engineers, the Brotherhood of Locomotive Firemen and Enginemen, the Brotherhood of Maintenance of Way Employees, the International Association of Machinists, and the Railway Labor Executives' Association.

In addition to the prepared addresses, these meetings were characterized by open forums devoted to the discussion of ways and means best suited to promoting the scrap-gathering campaign and featured the co-operation of government agencies, railway management and labor in promoting the success of the national undertaking. R. E. Woodruff, president of the Erie, acted as chairman of the Cleveland meeting, while Ralph Budd, president of the Burlington Lines; E. J. Engle, president of the Atchison, Topeka & Santa Fe System, and C. E. Johnston, chairman of the Western Association of Railway Executives, served as co-chairmen at Chicago. In the other cities, R. C. White, chief operating officer of the Missouri Pacific Lines, presided at Kansas City; Matthew S. Sloan, president of the Missouri-Kansas-Texas, presided at Houston; and Ernest E. Norris, president of the Southern, acted as chairman at Atlanta.

How Can Scrap Production Be Maintained?

The initial meetings at Cleveland and Chicago were devoted to the consideration of three important phases of the national drive; (a) proper organization, (b) difficulties tending to limit scrap production and (c) additional fruitful sources of ferrous scrap.

The consensus of opinion recognized the fundamental necessity of a perfected organization designed to (1) enlist the active support and interest of every railway officer and employee from the chief executive officer down through the ranks, (2) povide fequent and periodical follow-up measures to keep the entire personnel scrap conscious, and (3) assure ways and means of enlisting and maintaining the active co-operation of every employee.

Among the many factors that will have a limiting influence upon scrap collection are (1) the strict curtailment and restriction of critical materials, (2) the absence of general programs for the abandonment and dismantling of equipment, (3) the severe restrictions imposed on the allocation of new rail and track fastenings, (4) the broad expansion of salvaging and reclamation practices, and (5) the large collections of dormant scrap during the last 15 months point to need for searching out extensive new sources if a comparable proportion of this type of scrap is to be maintained.

The informal nature of the general discussion in the open forums produced many valuable suggestions regarding possible additional fruitful sources of ferrous scrap. These suggestions included (1) rechecking and reclassifying stocks of used rail, (2) the checking and scrapping of machinery and equipment held for sale and undisposed of after 60 days, (3) checking and obtaining authority for the scrapping or disposition of tanks held from wrecked or dismantled tank cars, (4) making detail surveys with the view of abandoning facilities that have not been used during the peak traffic

of the last few months, and (5) the inauguration of a plan whereby agents at way stations would be appointed scrap buyers for the purchase of outside scrap in communities where there are no scrap dealers.

In opening the Chicago session, Ralph Budd stressed the fact that in normal times the railways are the largest producers of scrap in the country and that, fully realizing the present national need, they pledge their full co-operation. All obsolete and irreparable equipment promptly will be converted into scrap, he said. By reason of the thorough organization of individual roads, they are prepared to follow through in the second national drive. Mr. Budd also pointed out that the roads are in a peculiarly favorable position, by reason of their extent and the familiarity of their thousands of employees with all parts of the country, to checking up and promote the production of scrap from outside sources and particularly among the farmers along their lines.

Ferrous Scrap a Vital Necessity

Early in the Cleveland and Chicago meetings, the nation's vital need of more ferrous scrap was emphasized by representatives of the Navy and the Army. Lieutenant Commander H. O. Fullerton, C. E. C., U.S.N.R., after paying tribute to the outstanding accomplishments of the national steel industry in 1943, declared that the production of munitions and war machines must be stepped up by at least 20 or 25 per cent during 1944, and that the 1943 production of ships for the Navy and the Merchant Marine must be increased by 20 per cent during the coming year. If we are to win this greatest of all wars, the commander continued, we must have more heavy bombers and transport planes for the Pacific theatre, more tankers, faster cargo ships, victory ships, floating drydocks—and speed of production is essential above every other consideration. Every melt of open-hearth steel requires from 40 to 50 per cent scrap, while electric steel, from which so much of the plate requirements will be manufactured, requires 100 per cent ferrous scrap, the commander declared.

Lieutenant Colonel P. W. Frieder, A. U. S., pointed out that the Army itself follows the American railways as the second largest producer of ferrous scrap; that after all the materials possible are salvaged in the field, the remainder is carefully sorted according to scrap specifications and as much as possible is returned to this country for our steel mills. In acknowledging the splendid co-operation of the railways in the collection of scrap, Colonel Frieder declared that the railways always have been known for their outstanding job in the preparation and classification of ferrous scrap and as the one dependable source of alloy-free scrap. Continuing, he emphasized the importance of the railways as sources of heavy melting scrap and rail for re-rolling purposes, as well as the vital necessity for continued production—for the scrap that can be gotten out *now* may be of more importance than any other period in the war, he said.

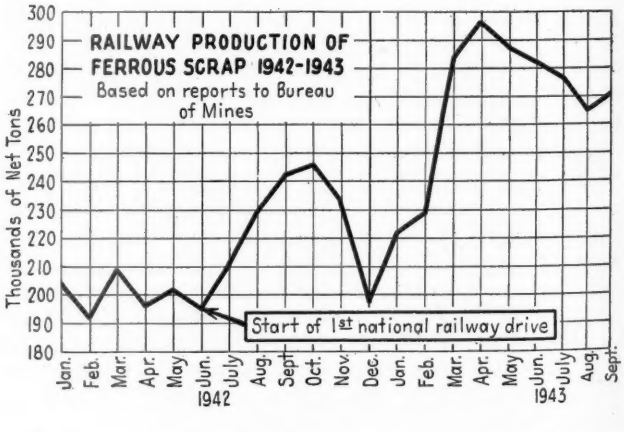
The Objectives of the Second Drive

In outlining the objective of the conference, Bert C. Bertram, chief, railroad unit, industrial salvage branch, salvage division WPB, declared that while the diminishing national stock pile of ferrous scrap is cause for considerable apprehension, the outstanding record of scrap collection by the railways during the last fifteen months, even in the face of severely restricted materials and supplies, is evidence that the response to the second national appeal will maintain and increase scrap production. The overall ferrous scrap quota for the second half of 1943 has been set at 15 million tons, 2 million tons more than for the first half, and a quantity that will maintain current inventories of 7.7 million net tons but which does not provide against contingencies. Of the overall total, approximately 9.8 million tons of scrap must be secured from our heavy industries and the railways are expected to contribute a substantial part, he said.

The larger quota, Mr. Bertram stated, is necessitated by (a) the increased productive capacity of open-hearth and electric furnaces placed in operation during 1943 and additional facilities scheduled for completion during the last quarter; (b) the need for more steel by the war industries, namely: (1) munitions production double that of 1942, (2) double the number and four times the weight of planes produced in 1942, (3) twice the merchant shipping tonnage of 1942, and (4) double the 1942 tonnage of naval vessels; and (c) the sharp decline in dealers' scrap inventories, which now are at the lowest point since the beginning of the 1942 drive.

The speaker also pointed out that ore shipments on the Great Lakes for 1943 now lag behind the shipments for the corresponding period of 1942 by more than 8 million tons, due to late opening of navigation (31 days lost last spring), and that the coal strike cost the use of an additional 300,000 tons of pig iron. To question the need for scrap now is to question the judgment of our generals, said Mr. Bertram; we must get the raw materials to meet their needs.

Although Mr. Bertram acknowledged a pronounced reduction in the production of railway scrap for each successive month since April, he informed the Chicago audience that preliminary estimates for September indicate a total production of 271,000 net tons, the first upturn in the production curve since the peak production attained in April, 1943.



Referring to the results of the first drive and the co-operation of the railways with his office, Mr. Bertram pointed out that 40,000,000 ft. of relay rail was delivered for military use within 9 weeks of the 1942 appeal (in addition to approximately 50,000,000 ft. or roughly 5,000 track miles of relay rail delivered by the railways to the armed forces and defense industries during the first half of 1942—Ed.). Under the present co-operative organization, based on a voluntary arrangement, some 550 individual railway salvage directors work directly with the salvage branch of the WPB. The chief of the railroad salvage unit also paid tribute to the extensive co-operation of the brotherhoods and labor organizatios for their activities in helping to get out the scrap.

At Chicago, Herbert M. Faust, director, salvage division, WPB, stressed the urgent need for making the victory scrap bank large enough to draw upon for any

emergency and cautioned against individuals who say that we do not need scrap. The salvage division does not undertake a project until the need has been determined, he said. Mr. Faust also urged railroad representatives to salvage all possible waste paper and, declaring that a "black market" exists in waste paper, added that nothing will cure that quicker than a plentiful supply of scrap paper.

George R. Littell, assistant director, Office of Defense Transportation, warned the Cleveland meeting that the period ahead will be one of the gravest in the history of our railroads; however, the ODT is confident that transportation requirements will be met. Mr. Littell declared that the railways must have more steel to provide adequate replacements for motive power, equipment, rail and track fastenings in order to meet future traffic requirements.

Labor Shortage a Pressing Problem

A. L. Prentice, manager of scrap and reclamation, New York Central, told the Cleveland audience that frequent "follow-ups" within individual organizations and the exchange of ideas and the discussion of methods among representatives of the various roads, at regular conferences, are among the most important considerations in promoting the successful accumulation of scrap. Referring to the recent lag in national railway totals, Mr. Prentice asserted that the lack of adequate manpower was an important factor in collections along the line and cited the fact that the labor shortage was also affecting the scrap plants, for, on his road 38 women workers are now employed at the Ashtabula, Ohio, plant, with one trick of scrap sorters now comprised entirely of women, production has been limited by reason of the considerably lower weight-lifting loads for women workers imposed by law. Considering the possibility of increasing scrap production, Mr. Prentice advocated the re-checking and possible reclassification of stocks of relay rail and materials set aside for repair and reclamation, as well as machinery or equipment held for sale and undisposed of after 60 days. He also suggested detailed inspection of tanks salvaged from wrecked or dismantled tank cars as another fruitful source.

J. J. Collins, manager of scrap and reclamation of the Erie, concurred with Mr. Prentice and added that the flow of current scrap has been reduced to some extent by the more extensive salvaging of usable parts from dismantled equipment and the broader welding rules used in conjunction with reclamation and repair work. He also emphasized the excellent returns obtained from the thorough organization and co-ordination of system and division scrap committees, particularly in conjunction with regular "check ups" and reports every 30 days. Notwithstanding the records of scrap accumulation during the last 15 months, Mr. Collins declared that the intensification of the new drive and closer inspection of railway properties will disclose additional sources that will add considerably to the collection of dormant scrap.

C. K. Reasor, acting manager of stores, of the Erie, suggested at the Cleveland meeting that, in view of the peak traffic carried by the railways during the past several months, it might be well to make careful surveys of all railway facilities and determine whether any of the unused tracks, buildings, bridges or other structures might not be abandoned and dismantled to provide additional scrap.

Referring to the vital need for scrap and the conservation of steel, Bert Ladley, general manager, River Terminal (Cleveland), condemned the bureaucratic red tape which has prevented their scrapping 20 obsolete tank cars, and dismantling 40 gondola cars from which, he restimated, sufficient materials and trucks could be salvaged to build 12 good gondolas. Mr. Ladley drew the attention of the Chief of the Railroad Salvage Unit to the fact that, after weeks and months of extensive correspondence with Washington authorities, permission has not yet been granted the River Terminal for disposing of this equipment.

Considerable difficulty in materially increasing the production of current scrap was envisaged by H. H. Haupt, general superintendent motive power, Central region, Pennsylvania, who pointed to recent records of smaller receipts of current scrap which, in the main, are occasioned by broad conservation measures. Illustrating his point, he said that locomotive side rods, wrist pins, and crossheads, which under former practices had been scrapped, are now being reclaimed by welding, heat treating and machining; side sheets for freight cars are being made up from small shearings or cuttings and the usable portion of corroded side sheets from old equipment—all were formerly fruitful sources of current scrap. Continuing, he pointed out that the now permissible turning of one-wear wheels conserves $\frac{3}{16}$ in. of head metal, the equivalent of 150,000 miles of additional service. In concluding his remarks, Mr. Haupt suggested the possibility of adopting and using rolled steel car wheels in place of rolled steel piston heads as an additional conservation measure.

J. L. Layton, emergency salvage director, Pennsylvania, in commenting on the organization and methods used in getting out scrap, stressed the need for keeping the entire railway personnel scrap conscious, by personal appeals to every employee, for, repeated checks have shown that scrap production has increased appreciably after each appeal. Scrap committees, traveling over the right-of-way, have been the means of uncovering and turning in large quantities of dormant scrap; however, this source has been largely exhausted and special efforts will be necessary to maintain and expand current production from all sources, he said.

Dormant scrap on the Chesapeake & Ohio, the Pere Marquette, and the Nickel Plate, is about at an end, asserted L. B. Allen, assistant vice-president and assistant to the president, at the Cleveland conference. However, he believed that there are additional possibilities of increasing the flow of current scrap, particularly since accumulations of maintenance of way scrap have increased while these forces have been engaged in other essential track work; this scrap will be accumulated before winter. G. O. Beale, purchasing agent for the same roads, added that by reason of the intensive nature of the previous drive and the broad increase in the salvaging of ferrous materials, estimates of production for the second drive are substantially lower than the receipts from the drive that was inaugurated last year.

In outlining the progress of scrap collection, F. R. Mullen, general manager, Chicago, Burlington & Quincy, lines west of Missouri river, stressed the advantages of a perfected organization and added that their organization, particularly the section foremen, has been instrumental in bringing in large amounts of scrap from outside sources, such as farm scrap along the line. Although the lack of adequate manpower introduces additional difficulties, the drive will be intensified he said. S. W. Swanson, traveling storekeeper, added that appeals to women workers now employed in many Burlington gangs, have been particularly productive in increasing scrap production.

William Buchanan, vice-president and general man-

ager, of the Louisville, New Albany & Corydon, pointed out that thousands of villages throughout the country do not have local scrap dealers and suggested the setting up of ways and means whereby railway station agents, throughout the country, may be organized as buyers of scrap.

After describing the results attained through the use of a four-man system scrap committee and the organized support of all employees, Peter Young, supervisor of reclamation, Atchison, Topeka & Santa Fe, declared that, while current scrap is moving in regularly, it will be necessary to look to new sources for the dormant type. Continuing, he said that the situation has not yet been thoroughly cleaned up and suggested looking overhead for old pipe lines, shafting and brackets as additional sources. He added that, with the easing of the market for used machinery during the last six months, old machinery and equipment should be carefully checked, culled and scrapped.

A. C. Mann, vice-president, Illinois Central, assured the Chicago meeting of their continued interest and that further intensive efforts would be made to keep up the flow of scrap. G. D. Tombs, traveling storekeeper, added that their scrap organization comprised four important divisions: (a) a general committee, (b) division committees, (c) a good-housekeeping committee, and (d) a suggestion system, all of which accounted for substantial collections. Whereas, previous efforts in getting out dormant scrap were centered largely around terminals, he suggested that similarly intensive methods, applied to outlying points, will bring good results; also, the reclassification of used rail stocks should be considered.

Although it is estimated that dormant scrap will show a slight decrease in the coming drive, it is anticipated that current scrap will more than balance that loss, so that total receipts on the Chicago, Rock Island & Pacific will exceed those of last year's drive by a small margin, A. T. Kipping, traveling storekeeper, told the Chicago meeting. He also stressed the importance of interesting all employees by first enlisting the all-out interest of the executives and communicating that interest down the line, to bring home to every employee that "the boss wants more scrap!". In describing the complete scrap-collecting organization on the Rock Island, Mr. Kipping pointed out that every traveling man is a member of the general committee and said that tips from train crews and others had resulted in direct action which netted substantial quantities of scrap from out-of-the-way sources, in more than a thousand different instances.

During the last year, the Milwaukee removed more than 1½ million ft. of rail from some 1,700 tracks during the course of its drive for scrap, which has never been relaxed, said J. W. Severs, assistant to trustee. This road also has reimbursed its agents for the use of their cars in collecting scrap from farmers and other outside sources, he said. Continuing, he estimated that the tonnage during the new drive should approximate that of 1942, with the exception of scrap from the program for dismantling equipment, which will be practically nil for 1944, and track scrap will be in direct proportion to the allotment of new rail and track fastenings for the coming year.

F. G. Nicholson, general manager, Chicago & Eastern Illinois, informed the Chicago meeting that, in addition to maintaining a substantial flow of current scrap, their railroad scrap organization has collaborated with individuals in small towns along the line, with the result of substantial additions to railway accumulations.

How Railroads Can Prepare for Post-War

By E. E. Norris*

TWENTY-FOUR centuries ago, the great Chinese philosopher, Confucius, said: "If a man take no thought about what is distant, he will find sorrow near at hand." If we of the railroads take no thought about what is coming tomorrow, we shall surely find sorrow near at hand—because the post-war world may be nearer than we think.

Let's first strike a post-war balance sheet for the railroads. On the debit side of our ledger, we shall find:

Debit

1.—The railroads will be in the worst physical condition they have ever been in; worse even than they were at the end of World War I—because they are now being used much more intensively than they were during that war period. They will need rail, ties, ballast, cars, locomotives, tools, machines of every description, and a thousand other things that have been denied to them by the restrictions of war.

2.—They will be saddled with a continuing load of taxes that would have been called fatal just a few years ago.

3.—They will have the highest level of wage rates in all their history. These, together with iron-clad working rules, will continue the labor cost of railroading at its all-time peak.

4.—They will be regulated by government, as they are now, in respect to almost every detail of their income and outgo, leaving but little freedom for management to make adjustments quickly to meet changing conditions.

5.—They will be faced with competition, the like of which they have never encountered before.

On the credit side of the railroads' ledger, we shall find these items:

Credit

A.—They will have the appreciation and the good-will of the American people for a war job superbly done. The significance of this item is its promise of fair treatment of the railroads by the agencies of government; perhaps the eventual co-ordination of the various forms of freight and passenger transport or, at least, some semblance of equality in the competitive situation.

B.—They will be in a position to capitalize on the priceless lessons they have learned during the war—how to do more with less; how to co-operate with shippers and receivers of freight to use the railroad plant more intensively and more efficiently; how to work together for the common good.

C.—Their financial set- ups will be somewhat strengthened by their vigorous efforts to reduce their funded debt with the returns from the abnormal load of wartime traffic.

D.—And they will have the advantage of swinging into post-war problems with their organizations and personnel fairly intact—and well conditioned by their experience in "doing the impossible" over and over again, all through the war period.

Add up these credit and debit items; range them one

* This article is a condensation of an address by the Southern's chief executive to the Western Railway Club, Chicago, on October 18.

against the other, and you will end up with disturbing fears about the future of our railroads under the present system of private ownership and operation. Yet I dare to predict that the railroads will lick their post-war problems; that they will go on, as privately owned and operated agencies of transport, to higher levels of usefulness and greater success than they have ever known before. I say this because I believe that the railroads have two aces in the hole; two intrinsic human qualities that, if used, will enable them to solve the problems of every tomorrow—namely, imagination and courage.

Before we go too far in pinning our hopes on these abstractions, let's be sure that we agree on what we mean by them. Imagination consists in taking parts of our conceptions and combining these parts into new and more useful forms. It creates by reason. It has strong emotion as its activating cause. And, it aims at results of a definite and weighty character—to think constructively; to make the most out of the materials and resources at hand; to build new and more useful things out of what we already have.

Sees No "Easy Sailing" After War

The railroads are not going to have easy sailing when this war is over. Certainly there will be less traffic to handle for awhile—with vigorous competition for every bit of it. The railroads are not going to have fat bankrolls with which to revolutionize and modernize their facilities and services overnight. As much as we would like to do it, we shall not be able to scrap our conventional passenger equipment immediately and gridiron the nation with shiny new streamliners. We shall still have to run most of the locomotives we've got for awhile, regardless of how nice it would be to buy all new ones. For a time at least, we shall have neither the money nor the opportunity to revolutionize the design of our freight cars, the character of our signal systems, or the layout of our yards and terminals. Radical and wholesale improvements will have to be introduced gradually.

Yet competition isn't going to wait. Which brings us squarely around to our first hope—that imagination will carry us through this critical early post-war period. I am not dealing now with poetic imagination, with daydreams, or with ideals. I am talking about down-to-earth, practical imagination; the kind that finds a way to make a paint brush and a smile serve as temporary substitutes for a super-duper streamliner; the kind that can make capital out of adversity; the kind that devises inexpensive ways to symbolize progress; the kind of imagination that is challenged and stimulated by the seemingly impossible.

Imagination Needed in This Business

The railroads of this country are today faced with the choice of either giving free rein to imagination or accepting the humiliating role of a carrier of that traffic which the other forms of transport don't want. If we hope to compete successfully in the years to come for high-class freight; for passenger travel; for the mail and express tonnage of the nation, we've got to apply imagination to every operation, every facility, every method of doing business. We've got to rid our house, from top to bottom, of obsolete concepts and beliefs.

Our airline competitors, when they day-dream about cargo carriers, make a great deal out of their natural asset of speed—in the air. But imagination quickly takes that one apart. It finds that, except for longer hauls, speed in the air doesn't mean so much after all; that it's the elapsed time from receipt to delivery of freight that counts. It finds out how much, and what part, of the available freight business could pay the higher charges of air transport, for speed alone. It finds out how much of a factor continuous chain delivery would be, knowing that, in most cases, speed is secondary to dependability after the first of a flow of deliveries.

Armed with these facts, imagination would then create a fast service to meet the real needs of most of the shippers and receivers of freight. It would follow up by devising a selling technique in which the economy and dependability of rail transportation would be emphasized, to offset the airline's advantage in speed. The result undoubtedly would be to hold to the rails a large part of the tonnage that might otherwise be glamorized into the air.

Even more spectacular would be the application of imagination to railroad passenger services; to equipment design; to road and yard and terminal operations; to accounting practices; and, most important of all perhaps, to merchandising methods. True, this would mean a revolution in railroading. But it would be a revolution even now past due.

The second ace in the hole; the second asset to which I referred a moment ago, is courage. Where imagination creates ideas, courage puts them to work. What I am talking about now is the kind of courage that dares to experiment; the kind that faces unpleasant facts squarely; the kind of courage that is necessary to set aside preconceived notions and personal bias, whenever so doing will improve railroad services, plant or methods. This is the courage of the open mind.

I said in the beginning that I have no fear for the future of these railroads. I based my optimism largely on the two assets, imagination and courage. Our problem is, therefore, not one of creating talent or capacity, but only one of unleashing inherent imagination and mustering latent courage; of re-energizing the vision, the ingenuity, the pioneering spirit that gave our nation the greatest system of mass transportation the world has ever known.

* * *

An Eating House Stop on the White Pass & Yukon

The 3-ft. Gage Train Stops at Bennett, in Yukon Territory, to Permit Passengers to Eat, the Grade Beyond Being Too Steep to Pull a Diner. Leased by the U. S. Army for the Duration, This Line Experiences Considerable Operating Difficulties from Deep Snow, 35-M.P.H. Gales and Temperatures Frequently as Low as –72 Deg. F.

Non-ops Get "Special" Wage Board

President follows procedure he adopted in Pacific Electric case, naming same three men to consider controversy resulting from Vinson refusal to approve eight-cent increase; four-cent raise for ops approved

WASHINGTON, D. C.

FOLLOWING the procedure which he adopted for the Pacific Electric case, President Roosevelt last week created another "special emergency board" to reconsider the non-operating employees' wage controversy, but when this issue of *Railway Age* went to press, the leaders of the 15 non-op unions, meeting in Washington, D. C., had not decided whether they would appear before the new board. Meanwhile Economic Stabilization Director Fred M. Vinson announced that he "will not disapprove" the four-cents-per-hour or 4.5 per cent increase for train and engine service employees, as recommended recently by the emergency board which thus passed upon the ops' demand for a 30 per cent increase with a minimum raise of $3 per basic day.

The "special" non-op board was created by an October 16 Executive Order, the three members being the same persons who served on the Pacific Electric "special" board which had submitted its report to the President on the previous day. They are: Elwyn R. Shaw, chief justice of the Supreme Court of Illinois; Richard F. Mitchell, former chief judge of the Supreme Court of Iowa; and Walter C. Clephane, Washington, D. C., attorney. They have the assignment which was refused by the original non-op board, headed by Dr. I. L. Sharfman, i. e., to reconsider the case in the light of Director Vinson's June 30 opinion rejecting the recommended eight-cents-per-hour increase.

In that opinion, as noted in the *Railway Age* of July 10, page 57, Mr. Vinson took the position that the Sharfman board's reliance on the "gross inequities" device as a way around the "Little Steel Formula" was not in accord with the stabilization program. He went on to suggest, however, that an increase for the lower-paid non-ops might well be justified from a "substandards of living" standpoint, with collateral adjustments for the purpose of preserving "interrelated job classification." Such collateral adjustments "should be tapered off so as to obviate the need so far as practically feasible for revisions in the higher wage brackets," Mr. Vinson added.

May Consider Award to Ops

In addition to being guided by the Vinson opinion, the "special" non-op board is authorized by the Executive Order to give "such consideration as it deems appropriate" to the not-disapproved increase for the ops. Mr. Vinson cited this authorization in his opinion on the latter. "In determining appropriate rates for interrelated job classification," he said, "the special emergency board created by the President to reconsider the non-operating case is authorized by the order creating it to take into account the wage increase recommended for the operating employees. The board consequently should be in a position to see that the adjustments to the non-operating employees bear a fair relation to the adjustments given to the operating employees."

This week's Washington meeting of the non-op leaders had been scheduled before President Roosevelt appointed the "special" board. It was called to consider the next move with respect to the impasse resulting from the failure to obtain government approval of the settlement reached with management, following Mr. Vinson's action rejecting the emergency-board recommendations. The settlement has been reported to involve substantially the eight-cent raise recommended by the board.

B. M. Jewell, president of the Railway Employees Department, American Federation of Labor, stated on October 19 that the labor leaders, who had then been in session two days, had not up to that time reached any decisions as to their next move. He did not anticipate that anything definite would be decided or announced until the evening of the 21st at the earliest. After Monday's session of the labor meeting, Mr. Jewell revealed that the conferees had received reports of their subcommittees on negotiations that had taken place since September 21 with Mr. Vinson, War Mobilization Director James F. Byrnes, and the President.

No Advance Notice to Unions

The unions, he went on, received no information about the appointment of the "special" board beyond what was included in the White House press release. They had no advance notice of plans to create it. It was the purpose of the non-op leaders, Mr. Jewell explained, to work out if possible what they will regard as a satisfactory settlement of the wage question. He added that the only solution acceptable is a wage increase for the non-ops, who, as George M. Harrison, president of the Brotherhood of Railway Clerks broke in to say, are "woefully underpaid compared to all other industrial workers."

Responding to questions, Mr. Jewell said his group had not determined its attitude with respect to the "special" board. The legal aspects of the situation was one of the matters receiving consideration. Meanwhile the board organized and held an executive session on October 20. It set October 28 as the date for the opening of public hearings, at which it expects that the labor representatives will appear. Under the executive order the board has until November 15 to make its report to the President.

However, the order, like that in the P. E. case, still gives Mr. Vinson the last word when it stipulates that the recommendations shall become effective fifteen days after the date of the filing of the report "unless and except to the extent that the Economic Stabilization Director otherwise directs."

Aside from exploring the legal phases, which it is said might result in court action challenging the legality of the "special" board, the labor leaders are reported to be considering other means of settling their case, such as an appeal to Congress. They have already received considerable sympathy and support in Congressional speeches, and on October 19 Representative Fish, Republican of New York, introduced House Joint Resolu-

tion 174 which would direct the Economic Stabilization Director to grant an increase of "a minimum of eight cents an hour" to both the non-ops and the ops. The pending four-cent raise for the ops is characterized by the resolution as only "a token increase."

Speaking in support of his resolution, Mr. Fish asserted that "we are threatened with and are possibly on the verge of a nationwide strike." While the possibility of a non-op strike vote as a later development is not ruled out in informed circles, the leaders were not talking along those lines this week. Generally they were represented as weighing their every move with a full appreciation of the wartime setting in which they have the responsibility of doing what they conceive to be their duty by the men they represent.

Meanwhile, however, there have been reports of "wildcat" strikes in the making because of the restlessness of the rank and file. Senator Langer, Republican of North Dakota, asserted in a Senate speech on October 18 that railway employees at Atlanta, Ga., had sent to President Roosevelt a telegram threatening a walkout unless the wage case was settled by November 1. Mr. Langer called upon the Senate to resolve that the President be requested to approve the eight-cent increase, in order "to prevent riots, strikes, bloodshed."

As noted above, the understanding for a settlement which the non-op leaders have reached with management is understood to involve an increase of substantially the eight cents recommended by the Sharfman board. President Roosevelt is represented as having given the labor leaders assurances that this settlement would be satisfactory to the government. Then, so the story goes, the President was convinced by Messrs. Byrnes and Vinson that the settlement should not be approved, lest it release other demands for general wage increases to the ruin of the stabilization program. It is understood that the government stabilizers did not object to the $204,000,000 a year involved in the eight-cent proposal. In fact they were willing that the ante should be raised another $50,000,000, but they insisted on graduated increases for the different non-op groups ranging from 10 cents an hour

(*Continued on page 656*)

How to Have High-Level Employment, While Preserving Freedom

"Our fundamental post-war problem will be that of producing an adequate total market for all the services and goods that can and should be produced for peaceful purposes by all the brains, labor and capital that should be employed.

"There is no reason, excepting ignorance and disregard of economic laws, why an adequate market cannot be created. There has as yet been afforded no evidence of any limit to the total services and goods that human beings will buy, use and consume, if afforded opportunity. And modern technology has shown it can provide means of virtually unlimited production. But, while we have solved the technological problems of unprecedented production, we have not solved the economic problems of developing an adequate peace-time market for all that modern technology can produce.

"In popular parlance, a market is a place in which services and goods are 'sold'. Actually, it is a place in which services and goods are *exchanged*. And in order to create an adequate peace-time market, and thereby make possible maximum production and employment, it is essential that the *prices* of different industries shall be so balanced that each industry and all it should employ can exchange all they should produce with other industries and their employees for services and goods produced by them. When the prices of some industries become too low compared with the prices of other industries, the lower-price industries and their employees become unable to buy their shares of the products of the higher-price industries. This curtails production and causes unemployment in the higher-price industries; and unemployment spreads from them into the lower-price industries. The labor costs of each business or industry largely or mainly determine the prices at which it can sell its products and operate at a profit.

"The accepted theory of old-fashioned liberalism for generations was that in naturally competitive industries prices should and would be kept in balance by competition, and that the rates or prices of naturally monopolistic industries, such as railroads and public utilities, should be regulated by government to keep them in balance with prices fixed in other industries by competition. But monopoly practices to control prices were adopted in some naturally competitive industries, while in others prices continued to be fixed by competition. The resulting unbalancing of prices inevitably restricted total production and employment.

"Unless there is a constant large investment of new capital there cannot long be adequate employment in the production and distribution of consumption goods and consumers' durable goods, and in the expansion of the plants by which such goods are produced and distributed. But new capital does not come into existence and go into investment automatically. Most of it must be derived, directly and indirectly, from the profits of agriculture, manufacturing, mining, transportation and other kinds of business.

"High taxes on corporations and on large individual incomes appropriate vast amounts that otherwise would become capital available for investment. Every substantial increase in the profits of any business or industry, even though temporary, starts a movement for an advance in wages. Labor union leaders, contending that labor has a right to participate in increased profits, try to appropriate immediately the benefits of reductions of costs due to technological progress, thereby preventing these benefits from being passed along to consumers in reduced prices.

"Experience has disclosed no means excepting competition of so balancing the prices of different industries that each industry can market all the goods that it should produce and afford all the employment that it should in producing them. Labor unions have become the strongest monopolies the nation ever had. Monopoly and monopoly practices are the greatest enemy of private enterprise, and of technological and economic progress. They have an inevitable tendency to throw and keep prices out of balance, and thereby to restrict production and employment.

"New Deal economists apparently believe the labor unions have become too strong, and should be too strong, for wages in private enterprise to be so adjusted as to make practicable an economically sound balancing of prices. Therefore, they advocate huge government spending to provide employment for those that they believe private enterprise will be unable to employ. When government makes investment to provide services or goods, it both (1) increases the taxes on private property and income, and (2) reduces the earnings that private producers of service and goods competing with government can make. The flow of capital into private enterprise, and its ability to furnish employment, are consequently diminished.

"Many nations have been ruined by government spending; but there is no record of any nation ever having been made rich by it. There is no alternative to adequate employment by free, competitive private enterprise excepting production and employment by a totalitarian state. We can have freedom and adequate production and employment only under free, unsubsidized, competitive private enterprise."

—Samuel O. Dunn at Midwest Conference on Industrial Relations at the University of Chicago

Five More Electric Locomotives Added to New Haven Fleet

Trend in design is to higher-horsepower single-cab units—newest type is suitable for freight and passenger service

THE General Electric Company recently delivered five a.c. electric locomotives to the New York, New Haven & Hartford. This completes delivery of the railroad's most recent order for ten. The first five were built by the Westinghouse Electric & Manufacturing Company and were delivered about a year ago. These were described in the September 12, 1942, issue of *Railway Age*. All of the ten units are built to the same design with duplicate or interchangeable parts and equipment.

Table I—Principal Dimensions and Weights of the Three Latest Types of New York, New Haven & Hartford Electric Locomotives

Year built	1931	1938	1943
Number of locomotives	10	6	5
Road numbers	0351–0360	0361–0366	0155–0159
Service	Passenger	Passenger	Freight
Wheel arrangement	2–C+C–2	2–C+C–2	2–C+C–2
Weights—total, lb	402,000	433,200	494,000
On drivers	271,800	272,400	360,000
Per driving axle	45,300	45,400	60,000
On guiding trucks	130,200	160,800	134,000
Wheel base—total, ft.—in.	66–0	66–0	69–0
Driving	37–4	37–4	37–4
Rigid	13–8	13–8	13–8
Length, over couplers, ft.—in.	77–0	77–0	80–0
Heights, pantograph, locked down, ft.—in.	14–6	14–10	15–0
Wheel diameter, driving in.	56	56	57
Guiding	36	36	36
Number twin armature motors	6	6	6
Motor type	GEA-621-A-1	GEA-622-A-1	GEA-627-N-1
Gear ratio	81/20*	78/23	89/18
Maximum permissible speed, m.p.h.	70	93	65

* As originally supplied these units are currently being equipped with 79/22 gearing for a maximum permissible speed of 80 m.p.h.

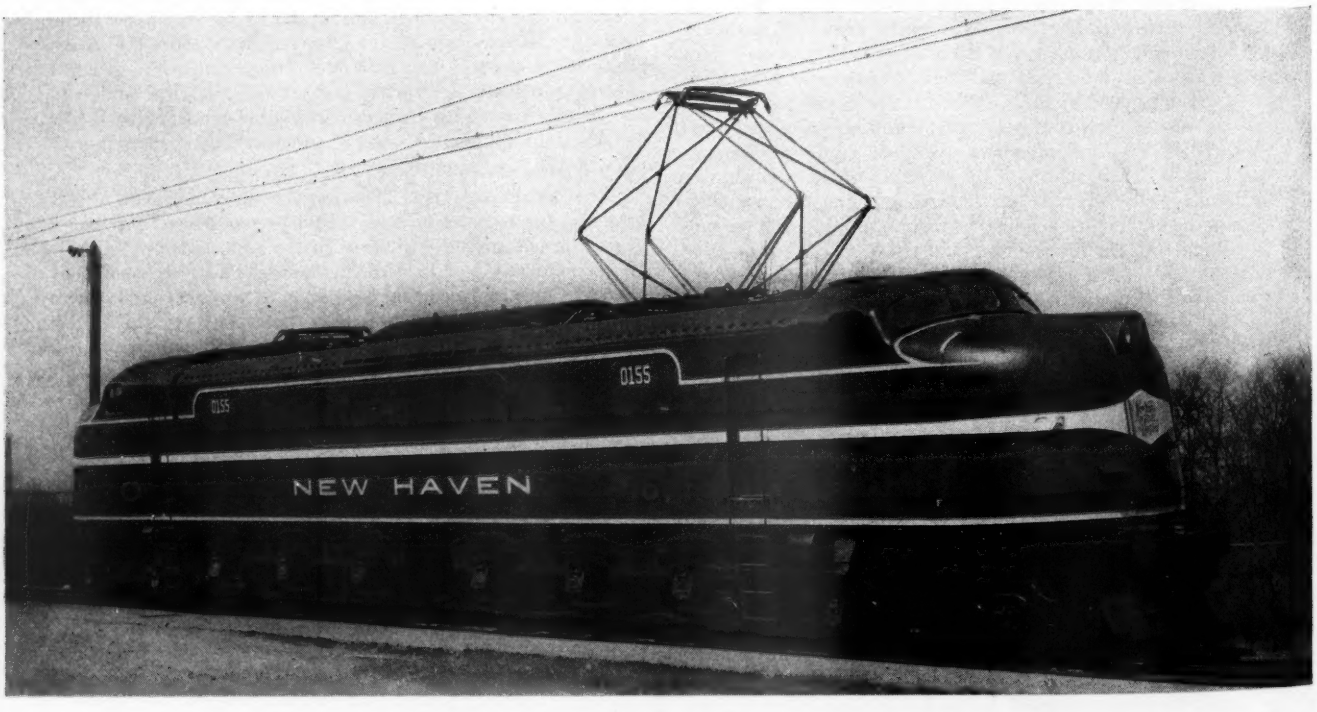
The purpose of this article is to compare the three most recent types of New Haven locomotives, built respectively in 1931, 1938 and 1943, and describe and explain features of design. All of these locomotives have a 2—C+C—2 (or 4-6-6-4) wheel arrangement, the basic difference being that those built in 1931 and 1938 were suitable for operation from either a 660-volt d.c. third rail or an 11,000-volt overhead contact wire, while the ten in the last group are made for use in a.c. territory only.

Table I compares the salient characteristics of the three sizes of General Electric locomotives and indicates clearly the trend to heavier axle loadings and greater horsepowers incorporated in single cab units.

The top speed-tractive force characteristics and the corresponding wheel horsepower characteristics of the three classes of motive power are compared in the diagram.

The latest units are similar in appearance to those furnished in 1938—indeed, the similarity is so striking that from a distance one class of locomotive may be very readily mistaken for the other. The same treatment of streamlining and decorative finishing has been employed on both classes.

The new locomotives are intended primarily for freight service, but may be employed with heating trailers in passenger service in the a.c. territory. Should traffic conditions warrant, the locomotives at some future date may be re-geared for a higher top-speed and



One of the Five A. C. Electric Freight Locomotives Built by the General Electric Company

train-heating equipment added. Removable ballast has been supplied initially and occupies the space that will be required for oil-and-water tanks and boilers in train-heating service. The running gear has been designed to permit of operating a top speed of 90 m.p.h. with re-geared traction motors.

The heavier axle-loading—60,000 lb. per driving axle initially with provision for increasing this to 62,000 lb.—is permitted because the new locomotives, designed for 11,000 volt a.c. operation only, will not be operated in the 660-volt d.c. territory which includes the New York Central's Park Avenue viaduct with its rigid bridge-loading restrictions.

The New Haven's specifications covering the 0155 class stipulate the handling of 125-car freight trains of 5,000 tons (non-adjusted) between Bay Ridge, N. Y., and Cedar Hill yard in New Haven, Conn., eastbound, with helper assistance out of Bay Ridge yards, on the Hell Gate Bridge approach and East New York grades, if train operations require a stop on these grades. Westbound performance requires the haulage of 3,000 tons trailing in 75 cars with helper assistance out of Cedar Hill yard and on the West Haven grade if a stop is required on this grade.

Passenger train service is stipulated as being capable of handling a heating trailer and twenty 85-ton Pullman cars between the Pennsylvania Railroad Station, in New York City, and New Haven (a run of 76 miles) on a 97-minute schedule with two 2-minute intermediate stops and observing all slow-down and speed restrictions. The class 0351 and 0361 units were designed to handle in express service but fifteen 80-ton Pullman cars, the 0361 unit handling this train on a somewhat faster schedule than that obtainable with the 0351 units because of the superior horsepower at speed of the 0361 locomotives.

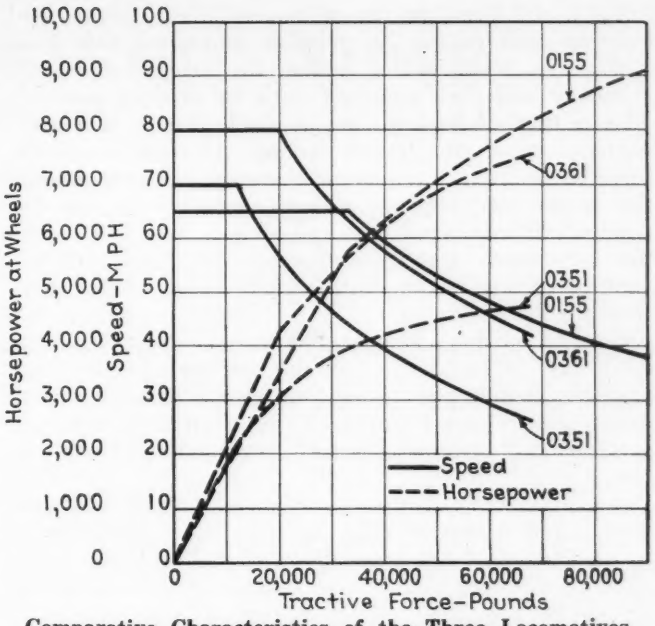
Tests, on both passenger and freight services, have demonstrated the ability of the 0155 units to meet the specification requirements without difficulty and with leeway ample to insure reliable freight and passenger-train scheduling.

Mechanical Equipment

The running gear arrangement is the 2—C+C—2 type which has proved so successful in modern high-speed electric locomotive operation. It consists of two three-axle driving trucks, connected by an articulated joint, and two two-axle guiding trucks. The cab is supported on this arrangement at two center-plates, 46 ft. 4 in. apart, and on four spring loading pads which are fitted with shims to permit an adjustment of the weight distribution between the driving and guiding trucks.

It may be found desirable to increase the weight slightly on the guiding trucks if the traction motors are ever re-geared for the maximum speed of the locomotive. This will increase the lateral restraint in the guiding truck swing bolster. In terms of percentage of the weight on the guiding truck, the initial lateral restraint is 27½ per cent, increasing to 32½ per cent with a bolster displacement of 1½ in., after which the restraint decreases gradually to 17 per cent.

To insure good riding qualities at the present maximum speed of 65 m.p.h., as well as at any future higher speeds, a guiding truck stabilizer is provided to restrain rotational movements of the guiding truck and a lateral restraint device is placed between the cab and one of the truck frames. Both of these devices are of design similar to those on the 0361 class of locomotive.



Comparative Characteristics of the Three Locomotives Described (See Table for Dimensions and Ratings)

The truck frame for each of the guiding trucks and main driving trucks is an integral steel casting. The draft gear is enclosed in an extension of the main truck frame. All buffing shocks are transmitted along the main truck frames and through the articulated joint. In order to allow the locomotive motive to negotiate curves, one of the center plates is made to slide longitudinally on the truck frame.

The equalization system is such that each main truck frame is supported on the equivalent of a three-point support; the guiding truck center plate is one support, the other two are through the side equalizer base and springs on the main truck frame.

Welding has been used extensively in the fabrication of the cab and cab underframe. The design is similar to that of the 0361 class locomotive in that the contour and details of the cab have been duplicated as closely as possible. And also, as on the 0361 class of locomotive, an outside truss is employed to strengthen the underframe, thus allowing a maximum amount of space for the equipment.

Electrical Equipment

As these locomotives will operate only on the a.c. zone, the electrical equipment is simplified considerably. There are six GEA-627-N-1 twin-armature, single-phase a.c. motors with commutating and compensating field windings. Each twin motor is capable of exerting 810 hp. continuously. The torque is transmitted to the driving axles through single solid gears mounted on hollow quills and double-end, flexible spring drives, as on the 0361 class.

To reduce the fire hazard to a minimum, Pyranol is used as the cooling medium in the forced-circulation, forced-air-cooled transformer. Taps are taken off the low voltage side of the transformer for voltage control of the traction motors and the operation of the auxiliaries.

An extremely fine degree of control is obtained by the PCL double-end control equipment. There are 22 notches on the controller, spaced to give the most desirable steps between minimum and maximum voltage on the traction motors. However, as it may sometimes be advantageous to have available on heavy freight

drags a still finer degree of control, there is provided between each of the 22 steps an additional two steps which are obtained by lifting the controller handle vertically and then lowering it to its original position. Thus a total of 66 steps are available though the intermediate steps are definite voltage increments of the same value for each notch and therefore on some notches the increments are not evenly spaced. But on the notches where locomotives slipping is likely to occur the increments are approximately even and full advantage can be taken of the intermediate steps where they are really needed.

Similar to the corresponding a.c. equipment on the 0361 class of locomotive are the two spring-raised, air-lowered, double-pan slider pantograph collectors; the dead-man's release feature; oil circuit breaker; lightning arrester and electro-pneumatic reversers and contractors.

An interesting feature in connection with the protective and operative relays is that they are designed to make contact automatically with their electrical circuits as they are mounted in position. This is accomplished by providing spring contacts as part of the locomotive wiring which make contact with studs on the backs of the relays. Thus the removal of a relay from the locomotive for repair or overhaul is greatly facilitated.

Unit assembly of the electrical equipment provides a compact and simple layout, particularly as the control of the traction motors is devoted solely to a.c. operation.

The motor leads from each of the three groups of two twin traction motors in series are brought up into the cab adjacent to the three-motor control units. These motor control units contain the control equipment required by their respective groups of traction motors.

The voltage control unit, comprising the transformer, tap contactors, auxiliary transformer nad preventive coils is centrally located in the cab and feeds the three motor-control units.

The auxiliary control unit contains the control equipment required by the various auxiliaries and is mounted at one end of the cab adjacent to the relay cabinet.

Auxiliaries

The locomotive is equipped with two type CPA-32 compressors providing a total displacement of 200 cu. ft. of air a minute. The compressors are driven by a.c. series motors. Westinghouse No. 8 EL brake equipment is employed.

The two blowers supply a total of 50,000 cu. ft. of air a minute which ventilates the traction motors, the transformer equipment, the blower motors and the motor-control units. In addition, the blowers also separate a large percentage of the dirt and moisture from the incoming air as was done on the 0361 class of locomotive. Experience obtained over a number of years has indicated that the air-cleaning feature is extremely desirable. Two-speed operation of the blowers conserves power and reduces blower noise when full ventilation is unnecessary. The blowers are driven by series-wound compensated commutator type a.c. motors, each of which drives a direct-connected 1½ kw. 32-volt (nominal) d.c. generator for battery-charging and control energy.

The storage battery is of the alkaline type consisting of 25 cells of Edison A4-H battery.

The locomotives are equipped with four-indication coded cab signal equipment supplied by the General Railway Signal Company.

Accessories include sanders, bells, speed indicators, horns, defrosters, air-operated window wipers and fire extinguishers.

Since the locomotives were built under war-time restrictions, every effort was made to conserve critical materials without sacrificing reliability. In addition to savings accomplished by the use of emergency material specifications, direct savings on the lot of five locomotives were made as follows:

Brass, by redesign of bearings, thrustplates, bells and marker lights, lb.	2,225
Copper, by substitution of iron pipe and fittings, lb.	6,250
Tin, by minimizing the number of soldered joints in wiring, lb.	50
Aluminum, by substitution of iron medallion castings and steel in the pantographs, lb.	600
Rubber, by redesign of hatch cover gaskets, lb.	220

Non Ops Get "Special" Wage Board

(*Continued from page 653*)

for the lower-paid down to four cents an hour. The labor leaders were unwilling to accept that range, although they are understood to have made a gesture at compromise in the form of some gradations.

Vinson Opinion in Op Case

As noted in the *Railway Age* of October 16, page 614, the general chairmen of five transportation brotherhoods were scheduled to meet in Chicago on Friday, the 22nd, to decide upon a course of action with respect to the four-cents-per-hour increase which has been offered to them. Leaders of these brotherhoods have denounced the award as an "insult," and there have been predictions that the general chairmen would "unanimously reject" it and perhaps call for a strike vote.

The opinion wherein Mr. Vinson announced that he would not disapprove this recommendation was a brief one. In addition to the closing reference to the new "special" board in the non-op case, as noted above, it had this to say:

"This recommendation is predicated upon the Little Steel formula. That formula permits wage adjustments to the extent of 15 per cent over average straight-time hourly earnings on January 1, 1941. These employees received in December, 1941, an increase amounting to approximately 10.5 per cent. Thus 4.5 per cent remains under the permissible limit of 'Little Steel' which figures about four cents per hour for these employees.

"As an original proposition the point could well be taken that the Little Steel formula should be applied to the average hourly earnings on January 1, 1941, for both operating and non-operating employees. If this were done the increases of December, 1941, to both employee groups would practically exhaust permissible wage adjustments under 'Little Steel' for railway employees. In the non-operating case, however, as in the case here, 'Little Steel' has been figured on the basis of each group. This results in no 'Little Steel' increase to the former and, as stated, four cents an hour in the instant case. This will not mean that the operating employees who have higher earnings will receive a wage increase while the non-operating employes will receive none. . . ."

Then came the reference to the new board and its assignment to reconsider the non-op case from the standpoint of what those employees are entitled to in the way of adjustments "based upon the substandard and interrelated job classification criteria."

Railroads-in-War News

Challenges Truckers to Save Equipment

Eastman says industry has to cut mileage and service to meet shortages

The trucking industry is faced in the months immediately ahead with a situation even more critical than that facing the railroads, according to Director Eastman of the Office of Defense Transportation, and in this critical situation, as he sees it, is a challenge to the industry to "conserve to the limit" in order to preserve its operations to the limit. Mr. Eastman made these points in the course of an address October 20 before the American Trucking Associations meeting at Chicago.

Reciting again some of the difficulties ahead of the truckers, the tire and replacement parts and gasoline and equipment and manpower shortages, all of which, he said, threaten the industry's ability to continue to function, the speaker remarked that "another great difficulty is the fact that the trucking industry can hardly, in one sense, be regarded as an industry at all. Certainly it is not a well integrated industry."

The A. T. A., he pointed out, "represents the trucking operations of the country only in part. It could not be otherwise, when it is considered that the 4,600,000 trucks have more than 3,000,000 owners. The operations are highly diversified, of innumerable kinds and descriptions, and there has not even been available any comprehensive and dependable information in regard to the character and extent of these operations and the work that they do."

The equipment situation in the highway transportation industry is disturbing, Mr. Eastman declared. In 1943, he continued, authorizations were obtained for the construction of 3,000 "integral" buses, 7,500 heavy-duty trucks, and 5,600 truck trailers, but actual production will not exceed 1,200 "integral" buses, 100 heavy-duty trucks, and 2,500 truck trailers. Apart from this program, 1,600 tank trailers were built to meet the oil emergency. For at least the next six months no substantial production of new trucks can be expected, he added. As "minimum requirements" for 1944, the O. D. T. has asked the War Production Board to approve the manufacture of 7,000 integral buses, 80,000 trucks—almost equally divided between medium and heavy types—and 25,000 truck-trailers. The bus program has been approved, but final action has not been taken on the truck schedules, said Mr. Eastman, and he pointed out that there is no certainty that the production that is authorized can actually be manufactured.

"There is still a tendency to treat military and lend-lease demands as imperative, regardless of their effect upon domestic transportation facilities," the O. D. T. director explained. "That military demands should be given the benefit of all doubts I entirely agree, but they cannot in the end be satisfied unless our domestic transportation system is in order. That system is in sober truth a part of the war machine."

To meet the demands that will be made upon highway transportation still greater efforts must be made in the conservation of present equipment, Mr. Eastman warned. Such conservation, he said, includes not only the care and maintenance of vehicles and tires, but especially the elimination of "all unnecessary mileage and service, with the utmost possible utilization of the trucks in the remaining service." Particularly, he added, greater use should be made of the joint information offices and of joint action plans for eliminating unnecessary mileage and service.

Okie Decorated Again

The Soldiers' Medal for extraordinary heroism, not in action, is the latest award to adorn the blouse of Lt. Col. Frederick W. Okie, who previously received the Legion of Merit medal for personal valor, according to an announcement recently made by Headquarters of the Military Railway Service, Transportation Corps, Allied Force Headquarters, in North Africa.

The new decoration was made as a result of Colonel Okie's action when a fire broke out in a captured railway freight depot full of enemy ammunition, incendiary grenades and other explosives.

"With utter disregard for his personal safety," the citation stated, "Colonel Okie supervised and assisted in coupling and removing cars of American ammunition, rations and bridge material, from which shells were exploding in all directions. His actions, even though in danger of death or injury from flying fragments, resulted in the saving of much badly needed supplies, and prevented serious damage to vital railroad facilities."

Colonel Okie is commanding officer of the 727th Railway Operating Battalion which has established a brilliant record for outstanding performance in the North African and Sicily campaigns. In civilian life he was division superintendent of the Southern at Birmingham, Ala.

"Liberals'" Leader Flays the Railroads

Vice-President Wallace calls for "clear-cut" laws to "restore competition"

Public transport is again being brought under monopoly control. Competition has already been effectively eliminated in the making of transportation rates. Excessive transportation rates now burden agriculture, industry and trade. Non-competitive rates deprive agriculture and industry of the benefits of more efficient and cheaper forms of transportation. Discriminatory rates are keeping the South and the West in a colonial status. Newer forms of transportation are being brought under monopoly control. Monopolistic conditions already present in transportation are fostering monopolies in industry.

These charges against the railroads and "Wall Street" were voiced and developed by Henry A. Wallace, Vice-President of the United States, in an address prepared for delivery and local broadcast before a meeting October 20 at Dallas, Tex., which was "sponsored by various civic and labor groups."

But in concluding, Mr. Wallace assured his listeners that "the day of accounting has come. Destructive practices in transportation and suppressive governmental policies under which monopoly thrives must now yield to the needs of the common man. These practices and policies must be reversed. The double talk in legislation which has permitted these conditions to exist must give way to clear and understandable provisions which protect the public. Private rate bureaus and rate-making conferences through which railroad bankers and railroad managers have been able to exact from the people unconscionable rates for rendering an indispensable service must be stripped of their power and their activities confined to legitimate practices in the public interest.

"A clear-cut declaration of legislative policy must insure to the newer forms of transportation an opportunity to develop without suppression. Competition must be restored. . . . We can cry out against the existing evils in transportation, but this is futile unless we do something about it. The industry has failed to offer anything constructive and, therefore, the people must look to their duly elected representatives in Congress. Our greatest need is to recast our transportation laws to insure the utmost development of each form of transportation. Thereby present and prospective monopolistic controls will be broken;

regional rate discriminations will disappear; and transportation will then truly serve the public interest. In this struggle for freedom, Congress will not fail the people."

Before making these predictions, Mr. Wallace had informed "the American people" that the purpose of the railroads' rate-making machinery is to make "the public pay a return upon an obsolete railroad capitalization." Although the "period of High Finance" in the industry occurred before the establishment of government control over railroad securities, "its consequences linger on," he said. Rates, he asserted, must "move in harmony with other prices" and must be freed from the influence of "the huge capitalization" of the railroads and their "unbalanced capital structure."

The farms and industries of the South and West, an "empire" which has been "drained dry by the tolls of monopolies," said the Vice-President, have been penalized by disproportionate and high rates. "Who makes these excessive rates?" he asked. Not the government, not the Interstate Commerce Commission, he continued, but the private rate-making machinery of the railroads, "which surpasses in size and complexity that of the Interstate Commerce Commission," and which "has arrogated to itself that control over rates which Congress sought to vest in a public agency." These private rate bureaus, "not even democratically organized with respect to their own membership," successfully block at their inception "virtually all rate reductions that threaten carrier profits," he informed his listeners.

Nine railroads reaching the Pacific fix the transcontinental rates for the whole country, Mr. Wallace went on to say, "Though these conferences and bureaus make pious declarations to the effect that individual railroads have the right to quote rates independently, the fact is that this right has long since become an empty fiction. Instead of responding to the recent exposé of their cartel methods by the Department of Justice by conforming to the law of competition which all business must observe, the railroads have rushed to Congress seeking special legislation to permit them to continue their illegal private rate-making practices," he declared.

The "early promise" of cheap transportation by highway and by waterway has been "largely nullified," said the speaker, by the action of Congress in placing these agencies of transportation under the jurisdiction of the I. C. C. Mr. Wallace foresaw this, he declared, referring to a letter written by him and others in opposition to those provisions of the Transportation Act of 1940 which provided for regulation of motor and water carrier rates. As a result of this legislation, he asserted, even though "farmers and businessmen have joined forces in promoting a national system of highways and waterways," even though "public funds have been directed to the development of airways and airports," motor carrier and water carrier rates have been "raised to the level of the rail rates," or "related" to them, through conspiracies between rate-making bureaus, and competition with air lines has been prevented through the Railway Express Agency contract which holds air express rates at an "artificially" high level.

The speaker then recited some of the arguments used by those who seek so-called uniform interterritorial freight rates. "How has it been possible to maintain these rate discriminations over the years?" he asked. Through the "united front" of the railroads' rate bureaus, and such agencies as the "Western Commissioner," this has been accomplished, Mr. Wallace asserted. And if the railroads or their bureaus failed to cooperate, he added, the Western Commissioner referred the question to a committee of directors, which met at 40 Wall Street, so that "the transportation policies for the West were made in Wall Street."

But "those who guide the destinies of the railroads" are not satisfied with the "cartel controls which they now exercise over all domestic transportation," the Vice-President declared. Through a plot, "sugar-coated to deceive the people," they seek "the enactment of legislation designed to permit the creation of a permanent monopoly of public transportation under the control of the railroads." If Congress "unhappily" should permit the creation of integrated transportation systems, said Mr. Wallace, "I am convinced the public would arise in its wrath and insist on public ownership of all transportation." However, he added, in his opinion, "transportation methods have not yet reached that state of static perfection which lends itself either to monopoly control or government ownership." Instead, he exclaimed, he hopes that competition will be restored, so that "the output of the entire nation will increase as the surplus labor of the South and West becomes more skilled in the full utilization of southern and western natural resources for the benefit of the entire nation."

Simpler Bus and Truck Reports

Under Administrative Order O.D.T. 9, made public October 18, by the Office of Defense Transportation, new and simpler record-keeping requirements for bus and truck operators have been made effective, superseding the records required for the quarterly operation reports and monthly idle vehicle reports which have been replaced by a six-question form.

I.C.C. Service Orders

By Service Order No. 160, effective October 15, the Interstate Commerce Commission, acting at the request of the Office of Defense Transportation, has directed the suspension of tariffs permitting cars loaded with grain or seeds to be held for reconsignment, diversion or other disposition orders, but excepting those held for sampling, at Glenwood, St. Cloud, Staples, Thief River Falls, and Willmar, Minn.

Under the provisions of Amendment No. 3 to Service Order No. 115, effective October 20, restrictions on holding for diversion, reconsignment, or orders cars of fruits and vegetables originating in the South have been modified so that the prohibition applies to shipments originating in Alabama, Georgia, Florida, Mississippi and Louisiana when held at points on the Atlantic Coast Line east of Atlanta, Ga., and north of Waycross, on the Seaboard Air Line and the Southern east of Atlanta and north of Savannah, or on the Richmond, Fredericksburg & Potomac.

The provisions of Service Order No. 68, as amended, have been further modified by Amendment No. 3, effective October 20, which excepts remnant shipments transshipped from vessels to railroad cars, where the cars are loaded by the railroad, provided charges are assessed on weight of 10,000 lb. or more.

Coal Administrator Ickes Sets Up Engineers' Committee

Solid Fuels Administrator Ickes announced October 14 the appointment of a committee of 62 engineers, including several from the staffs of railways serving the southern Appalachian coal fields, to assist his office in general consultation and field survey work in connection with engineering problems involving utilization of coal. Their services will be available also to industrial consumers who wish advice on combustion problems, it was explained. The committee will serve the SFA without compensation, and its members will be free to continue their regular work, Mr. Ickes added.

Denies Inefficiency in Port of New York

The Joint Steamship and Railroad Committee of the Maritime Association of the Port of New York, whose membership consists of officers of about 1,000 steamship companies, railroads, foreign freight forwarders, stevedores, lighterage companies, towing companies, warehousemen and other allied shipping trades, on October 20 made known its reply to Senator Harley M. Kilgore (W. Va.), chairman of the Subcommittee on War Mobilization, taking "very serious exception to the dissemination of such erroneous information" as was entered in the Kilgore report in Washington last week.

The report had charged that in the port of New York "forwarding of cargo and the allocation of harbor facilities among the various agencies responsible for discharging and loading ships is actually impeded by lack of central direction or control."

Offering a flat denial to this charge, the Joint committee disposed of each step of the Kilgore report with the conclusion "that your information must have been secured from a source that has no knowledge of true fact, because all of this work has been thoroughly co-ordinated."

In its letter to Senator Kilgore, the Joint Committee asserted there is no "spirited bidding or bickering" for lighters, tugboats and heavy lift equipment, the Office of Defense Transportation, through its Division of Coastwise and Intercoastal, having this privately-owned lighter situation under control. There is a Tug Coordinator also for this harbor, the Committee explained.

With respect to heavy lift equipment, "this equipment is allocated on request and used in loading and unloading vessels with no delay," and as regards railroad heavy

lift equipment, "the General Managers' Association of the railroads serving this port, over two years ago put into effect the rule that heavy lift equipment of one railroad is used to handle heavy lift cargo from all railroad lighters alongside a vessel."

Also based on "erroneous information" the Joint Committee contends, was the statement in the Kilgore report that tonnage handled in New York is "still substantially below peak peacetime levels." During 1939, the Committee reveals, the monthly number of cars of export freight, including grain and coastwise, delivered to steamers in this harbor averaged 12,640 cars per month. This is much higher than the peacetime average, they say, and in May, 1943, the average reached 36,971 cars, and by September of this year, 45,493 cars. This, the Committee mentions, is proof of "efficiency and co-ordination."

The Kilgore report also charged the "primary limiting factor in New York is the inland carrier capacity, including the lighters which deliver the bulk cargo to shipside," adding that "pre-war operation of railroad terminals and lighters owned or chartered by the railroads continues unchanged." The Committee disputes these statements, attesting that the railroads, through the General Managers' Association of the Trunk Line Railroads have co-ordinated operations, which have now been in effect for some years. In support of its denial the Committee explained that "the floating derrick of one railroad performs service in lifting heavy lifts from lighters to dock or to steamer for all railroad lighters alongside." Moreover, "a carfloat of one railroad will pick up and deliver refrigerator cars from two or three railroads to one steamer." There is, too, it asserts, "interchange of equipment and towing."

A further "lack of understanding" and "misinformation," in the mind of the Committee is the statement in the report that "freight consigned to one ship may be brought forward in small lots relative to the capacity of a cargo vessel, by different railroads, unloaded at as many different railroad terminals and reloaded, still in small lots, into lighters for delivery to the ship." Lighters, through co-operation of the railroads and steamship operators, have been loaded with capacity loads, the Committee observes.

Not based on experience, but purely theory is the suggested pooling of railroad terminal facilities and creation of a lighter pool, it continues. "There is now an interchange of equipment, both lighters and tugs and from a practical standpoint, any attempt to go beyond what has been done would mean chaos from the standpoint of transportation."

In closing, the Committee points out that in addition to its own group and several other agencies, it receives full co-operation from the Association of American Railroads, represented in this port through George C. Randall, manager, port traffic, and Stanley Lewis, assistant manager; the Operating Vice-Presidents Committee of the Trunk Line Railroads, of which J. F. Deasy, executive vice-president, Pennsylvania, is chairman; and the General Managers' Association of the Trunk Line Railroads, of which George J. Ray, vice-president of the Delaware, Lackawanna & Western, is chairman, and A. P. Stevens, secretary. Finally, the Committee expresses the hope that that portion of the Kilgore report dealing with transportation be stricken from the record.

Charges St. Louis Ordnance Wastes 67,000 Car-Days

The Mid-West Shippers Advisory Board has asked the Office of Defense Transportation to investigate excessive hauls and unnecessary cross-hauling of coal in the St. Louis area, charging that 67,000 car-days are lost annually because the St. Louis smoke ordinance excludes high volatile domestic coal from that market and compels the purchase of coal from distant mines. The board contends the O.D.T. is inconsistent when it asks one section of the country to curtail excessive hauls but condones the practice in another.

To Curtail Delays in Moving Northwest Grain

With 10 million bushels of wheat now "on the ground" in the northwestern states, steps have been taken by the Interstate Commerce Commission to expedite its movement to market.

Acting on recommendation of the O.D.T., the I.C.C. on October 15 ordered three railroads—the Great Northern (at St. Cloud and Willmar, Minn.); the Northern Pacific (at Staples, Minn.); and the Minneapolis, St. Paul & Sault Ste. Marie (at Thief River Falls and Glenwood, Minn.)—to halt their practice of accepting bills of lading for cars of grain billed "hold for orders."

This practice of billing cars to outlying sampling points has caused an average delay for each car of 48 hours and frequently as many as 96 hours, occasioning congestion at warehouses.

The "hold for order" practice, outgrowth of an arrangement made several years ago, when the three railroads involved established outlying sampling points that samples might be drawn from the cars at these points and sent by passenger train into the Twin Cities, was established originally with the idea of disposing more quickly of cars and saving terminal switching and congestion.

This new directive in no measure affects the railroads' practice of sampling cars of grain on arrival at towns mentioned.

"Special" Board Submits Pacific Electric Wage Report

The "special emergency board" which President Roosevelt appointed to reconsider the Pacific Electric wage controversy which produced the recent two-day strike submitted its report on October 15, thus meeting the deadline set up in the President's order creating the board. The order also provided that Economic Stabilization Director Fred M. Vinson would act upon the report within 10 days after it was submitted; and it was stated at the White House that the report would not be made public until Mr. Vinson acted.

Members of the "special" board are Chairman Elwyn R. Shaw, chief justice of the Supreme Court of Illinois, Richard F. Mitchell, former chief judge of the Supreme Court of Iowa, and Walter C. Clephane, Washington, D. C., attorney. They considered the situation created by Mr. Vinson's action cutting to three cents a wage increase of 13 cents which was recommended last May by a National Railway Labor Panel emergency board. They heard the P. E. management as well as the employee representatives urge approval of a 13-cent raise.

Says Use of War Prisoners Would Violate Treaty

Although proposed arrangements for the use of war prisoners on railroad work have been cleared by interested government agencies, the railroad labor organizations still adhere to their policy of refusing to approve of their members working with the prisoners. That policy, insofar as member unions of the Railway Labor Executives' Association are concerned, was embodied in a resolution adopted by R.L.E.A. some time ago.

Most of the resolution's "whereases" dealt with the safety angle, but there was one which expressed the view that the assignment of prisoners to railroad work would violate the so-called "Geneva Convention." The pertinent provision of that covenant was quoted as follows: "Labor furnished by prisoners of war shall have no direct relation to war operations. It is especially prohibited to use prisoners for manufacturing and transporting arms or munitions of any kind, or for transporting material intended for combat units."

O.D.T. Makes Burlington Officer an Assistant Director

The appointment of James E. Carroll as assistant director of the freight and passenger section in the Division of Railway Transport of the Office of Defense Transportation was announced recently. In this position Mr. Carroll succeeds W. E. Hayes, whose appointment as executive representative at Washington, D. C., of the Chicago, Rock Island & Pacific was reported in *Railway Age* of September 11, page 436.

Mr. Carroll was born July 15, 1883, at Bogard, Mo., and attended the public schools in that vicinity and at nearby Carrollton. In 1900 he entered the employ of the Chicago, Burlington & Quincy, with which road he has been connected since that time, except for very brief intervals early in his career. Until 1906 he was an operator and agent at various country stations in Missouri and Iowa. In that year he became a clerk in the local freight office at Kansas City, Mo., and in 1909 he was put in charge of the freight claim department in that office.

From 1911 to 1915 Mr. Carroll was an inspector in the Burlington's freight service, with headquarters at Kansas City, while from 1915 to 1918 he was a service inspector and special inspector stationed at St. Louis, Mo., and later at Chicago. In 1918 he was promoted to trainmaster, being stationed until 1920 at Casper, Wyo., and from then until 1926 at Hannibal, Mo.;

in 1926 he was again promoted, being made assistant superintendent at Brookfield, Mo. In 1930 he was transferred to St. Paul, Minn., with the title of assistant superintendent, and he has filled that position since then. However, since the summer of 1942 he also has been attached to the staff of the executive vice-president of the Burlington, supervising freight terminals.

Victory Garden Citations

Four railroads—the Baltimore & Ohio, Burlington Lines, the Gulf, Mobile & Ohio and the Illinois Central—have been awarded plaques by the National Victory Garden Institute, New York, for their efforts to alleviate food shortage through employee gardens. With hundreds of industrial organizations taking part in this national movement, acres under cultivation ran into the thousands and food produced into hundreds of thousands of dollars.

O.D.T. Appointments

The Office of Defense Transportation has announced the appointment of Edward K. Garrison as Pacific Coast regional manager of the tank car service section of the Division of Petroleum and Other Liquid Transport, with headquarters in San Francisco, Calif., replacing Eugene W. Jackson, who has resigned to return to private industry. During the past 18 months Mr. Garrison has been on the staff of the War Food Administration, after many years in the service of the Chicago, Milwaukee, St. Paul & Pacific as general agent at various points.

At the same time, the O.D.T. announced that a field office of the tank car service section has been set up at Los Angeles, Calif., with Forrest O. Moore in charge as district manager. Mr. Moore has been associated with the O.D.T. some 6 months, during a part of which he allocated tank cars at Norris City, Ill., for movement east, while that point was the terminus of the so-called "Big Inch" pipeline. He formerly was traffic manager of the Imperial Refineries, St. Louis, Mo.

Senate Committee Would Probe Equipment Situation

Investigation by the Senate committee on interstate commerce of "the causes of the existing shortage of railroad equipment for transportation purposes, and means of relieving such shortage" is called for in Senate Resolution 185 which has been reported favorably from that committee. The resolution as originally introduced by Senator Langer, Republican of North Dakota, called for a probe of "the existing shortage" of cars for the transportation of grain in the Northwestern states; but it emerged from the committee with amendments broadening the scope of the inquiry to cover the equipment situation generally.

The committee's report recognized "that the railroads have been and are performing a splendid service, and are doing their utmost to solve this problem of equipment shortage." At the same time, the committee concluded "that an investigation and study of the matter, as outlined in the resolution, would bring out all of the facts so that the need, if any, for remedial legislation could receive early attention by the Congress."

Previously the report had referred to information received by the committee which made it apparent that "there exists at the present time a serious shortage of railroad equipment, particularly equipment for the transportation of grains, potatoes, and other farm products. In the Northwestern states, for example, there is an acute shortage of box cars for the transportation of wheat, flax, and other grains. The committee is informed that similar shortages exist in other parts of the country."

Roddewig Becomes Assistant General Counsel of O.D.T.

Clair M. Roddewig has been appointed assistant general counsel of the Office of Defense Transportation, succeeding Hallan Huffman whose appointment as general attorney of the Great Northern was announced in the *Railway Age* of October 16, page 625. Mr. Roddewig, who came to ODT some time ago from the legal division of the Interstate Commerce Coimmssion's Bureau of Motor Carriers, has been attorney in charge of local transport matters.

In his new position of assistant general counsel he will handle legal matters for the federal manager of the ODT-operated Toledo, Peoria & Western, and will have charge of legal work for various ODT divisions, including the Division of Railway Transport and the Division of Traffic Movement.

New Grain Door Ceiling Prices

Specific ceiling prices on so-called general manager type grain doors and on temporary coal doors for box cars were set October 14 by the Office of Price Administration.

In announcing the ceilings, the OPA stated that the prices established are about 10 per cent above those previously prevailing for grain doors, and about 33 per cent above those previously prevailing for the coal doors. While the increases will add to the expenses of railroads handling grain and coal in box cars, it added, these higher costs will not bring about any change in transportation costs.

A scale of prices was set for No. 4, or top grade grain doors, in two sizes, 7 ft. by 20 in. by 1⅝ in. thick, and 7 ft. by 10 in. by 1⅝ in. thick, as follows: Hemlock or other northern woods, $1.35 and $0.81, respectively; Ponderosa pine, $1.23 and $0.74; Douglas Fir or other western softwoods, $1.19 and $0.71½; and Southern pine and other southern softwoods, $1.31 and $0.78½. These prices are f. o. b. mill. Ceiling prices for No. 3 doors are set at 5 cents less than the corresponding No. 4 type; for No. 2 doors, 10 cents less; and for No. 1 doors, 15 cents less.

The ceiling price established for 7 ft. by 2 ft. temporary coal doors is $0.77; for 6 ft. by 2 ft. doors it is $0.68.

Maximum Price Regulation No. 483 establishes the new ceiling prices, and for grain doors and temporary coal doors it supersedes the provisions of the General Maximum Price Regulation.

Phila. Q. M. Chief Honored

Lt. Col. John Biggar, veteran of three wars, 45 years with the Quartermaster Corps, and until his recent retirement, chief of transportation and motor transport at the Philadelphia Q.M. Depot, has been presented with the Legion of Merit.

In making the award, the War Department cited Colonel Biggar for exceptional skill in "planning, operating and co-ordinating commercial traffic and motor transport activities at the Philadelphia Depot . . . thus getting supplies to distributing depots and ports of embarkation . . ."

The award was presented by Brig. Gen. Roland Walsh, Commanding General of the Depot, at the annual meeting of the Philadelphia Chapter of the Quartermaster Association. He observed that Colonel Biggar was recognized not only by high officials in the Q.M. and Transportation Corps, "but by the heads of our great railroads and trucking companies," as well.

Colonel Biggar entered the military service in 1898. Following the Spanish-American War, he served during the Boxer uprising in China. In World War I he was commissioned a captain in the Q.M. Corps, serving for six years in France, Belgium and Germany until 1923.

Then followed posts in Chicago, Washington and Brooklyn, retirement in 1933, and his being called back to duty in Philadelphia in 1941.

Materials and Prices

The following is a digest of orders and notices of interest to railways, issued by the War Production Board and the Office of Price Administration since October 4:

CMP Regulation No. 1 Revised—A revision of CMP Regulation No. 1, revising the small order procedure; making provision for tentative acceptance of authorized controlled material orders; modifying rules relating to time for delivery of authorized controlled material orders and making minor changes of a formal nature, was announced by the WPB on October 5.

The definition of "a small order" has been modified to include delivery orders for class A products placed with manufacturers where the amount of any controlled material required to fill the order does not exceed 3 tons of carbon steel (including wrought iron), 1200 lb. of alloy steel, or 300 lb. of copper and copper base alloys or 500 lb. of aluminum per quarter.

Only prime consumers who have received authorized production schedules from a claimant agency or the WPB, or secondary consumers who have received authorized production schedules from prime consumers or from other secondary consumers may use the small order procedure to obtain Class A products needed as production materials. In some cases claimant agencies may be permitted to use the small order procedure.

In using the small order procedure, a purchaser of class A products may not order from all his suppliers more of the same class A product for delivery during any calendar quarter than can be made from the quantities of controlled materials which define the small order limits. Purchasers may place small orders for delivery in any one calendar quarter for any number of different class A products, provided the amounts of controlled materials involved are within the defined limits.

In cases where the manufacturer has used the

small order procedure, believing his total requirements for the product he is ordering during the quarter will be within the small order limits, and later discovers that due to unforeseeable circumstances his total requirements for the product during the quarter will not be within the small order limits, he may still use the procedure, but must charge the allotment account with the total quantity of controlled materials needed to fill all small orders for the product to be delivered to him during the quarter.

The amendment also specifies that when a producer finds that he is going to be unable to deliver an authorized controlled material order on the established delivery date, he must promptly advise his customer of the approximate date when delivery can be scheduled, and keep his customer advised of any changes in that date.

If a controlled material producer is unable to accept an authorized controlled material order because of the scheduling provisions of CMP Regulation No. 1, but has open capacity available in either of the two months following the month in which delivery is requested, he must accept and schedule the order for delivery as early as possible and must promptly notify his customer that the order has been accepted, subject to confirmation within seven days, for a specified later delivery date. If the producer does not receive confirmation of the order from his customer within the seven-day period, he must reject the order, but in the meantime, he must reserve his capacity for it. If the new delivery date falls within a later quarter than the one shown on the original authorized controlled material order, the confirmation has no effect unless it is accompanied by the customer's certification that he has an allotment valid for the new quarter, in which case the customer must charge the order against that allotment. Confirmation and certification may be by letter or telegram.

The interpretations issued under CMP Regulation No. 1 have been changed to reflect the changes in the amendment.

CMP Regulation No. 1, Direction 34—A procedure to be followed by persons desiring to purchase class A facilities from manufacturers where an allotment of controlled materials is needed but may not be obtained under procedures outlined in CMP Regulation No. 6, dealing with construction and facilities, has been established by the WPB with the issuance of Direction No. 34 to CMP Regulation No. 1, issued October 4. The procedure applies to applications for priorities assistance to purchase class A products which are machinery or equipment generally carried as capital items on manufacturers' books.

In most cases applications for such priority assistance will be filed on Form WPB 541 (formerly PD-1A), but in certain cases, special forms applicable to special items of equipment will be used. The form should be filed with the WPB, Washington, D. C. Before the application is filed, the applicant should have the manufacturer, from whom the facility is to be purchased, fill out and sign a Form CMP-4A, application for an allotment of the controlled materials necessary to manufacture the facility. This form, together with one copy, should be filed with the application for priorities assistance.

When such applications are approved, the WPB will (1) assign a rating for the purchase of the facility and (2) make an allotment of the controlled materials necessary for its manufacture. The allotment will be sent to the purchaser of the facility on Form CMPL-150, and he in turn, must make an allotment to the manufacturer on Form CMPL-150A. The purchaser will use the preference rating assigned on Form CMPL-150 in placing the order. The letter transmitting the CMPL-150 will explain how the purchaser may place his order and handle the allotment.

The manufacturer may then use the allotment and extend the preference rating to purchase controlled materials, class A and class B products, and other materials which he will require as production materials for the manufacture of the facility. The manufacturer must accept the order for the facility or reject it in conformity with Paragraph (p) of CMP Regulation No. 1. If he is compelled to reject the order, the purchaser may then place an order for the facility with any other manufacturer he may choose. An allotment of controlled materials may be made to the manufacturer who accepts the order without any further approval of WPB.

If a producer needs an allotment of controlled materials for a class A facility which he is going to manufacture himself and he may not obtain the allotment under CMP Regulation No. 6, he may follow the same procedure and use the allotment and preference rating which he receives to obtain any products or materials required to manufacture the item.

Cutting Tools—Revocation of General Preference Order E-2-b, governing the production and distribution of tools for cutting metal, was recommended by the Cutting Tool Industry Advisory Committee at a meeting in Washington with WPB representatives last week. The members of the committee expressed the opinion that the cutting tools industry henceforth should be governed only by the provisions of Priorities Regulation 1 and other general regulations of WPB. The proposed revocation is not meant to indicate a reduction in the requirements for cutting tools, in the opinion of the committee, but merely that peak production has been reached and that while the need for cutting tools is still urgent, it is believed that the industry can function in a more effective manner without the order.

Direction 13 to CMPR-1-Revoked—Revocation of Direction 13 to CMP Regulation No. 1, dealing with complete bills of materials, was announced by the WPB October 9. This action was taken because prime and secondary consumers may no longer be required to submit complete bills of materials, according to Supplement No. 1 issued September 25, 1943, to the "Instructions on Bills of Materials."

Industrial Instruments—Limitation Order L-234, issued December 24, 1942, which provided for scheduling operations for industrial type instruments, has been revoked because these instruments are now classified under General Scheduling Order M-293. Types of industrial instruments affected include pyrometers, tube-system temperature instruments, liquid level instruments, industrial thermometers, pressure gages, flow instruments, combustion control equipment, control valves and regulators.

Soda Ash and Caustic Soda—Silicate of soda, sodium carbonate (soda ash) and sodium hydroxide (caustic soda) were removed from Schedule A of General Inventory Order M-161 September 30, by amendment of the order by the WPB. Schedule A lists materials which are not subject to inventory restrictions.

Steel Posts for Snow Fences—Limitation Order L-211, Schedule 14, as amended, and Amendment 2 to Conservation Order M-126, issued by the WPB on October 7, permit the use of longer fence posts, made of re-rolled stock from used rails, and designed for use with snow fences. Under the new regulations the number of styles are limited to two, one weighing 1.33 lb. per ft., maximum and the other, 1.12 lb. per ft., minimum. Lengths allowed: 5, 5½, 6, 6½, 7, 7½ and 8 ft. Wire fastenings are optional and the maximum weight of anchor plate is 0.65 lb. Not more than one coat of paint is allowed.

Prices

Boilers and Radiation—To assure essential production of cast-iron radiation, the OPA authorized an increase of 3 ct. per sq. ft. in sheet prices of all types of cast-iron radiation, in Amendment No. 3 to Maximum Price Regulation 272 (Cast-Iron Boilers and Cast-Iron Radiation), effective October 9.

The adjustment of maximum prices was the minimum required by law in exceptional cases where essential production is threatened by operating losses due to increased costs and declining volume, and the action was taken by OPA after an analysis of volume and cost data covering virtually all producers and after numerous conferences with members of the industry.

While the amendment provides for an increase of 3 ct. per sq. ft. in sheet prices, the net addition to the manufacturer's realization after the application of customary functional discounts of 15 and 5 per cent, is slightly less than 2½ ct. per sq. ft., which, OPA said, will assure production required to meet essential needs.

When the regulation was issued on November 23, 1942, the prices for cast-iron radiation were reduced an average of 12 per cent but since that time declining volume, resulting from construction curtailment, coupled with rising labor costs has brought about operations at a loss which threaten the maintenance of an essential supply.

Gray Iron Castings—Sellers of gray iron castings are given a streamlined procedure for obtaining permission to add overtime costs to maximum prices by Amendment No. 6 to Maximum Price Regulation No. 244 (Gray Iron Castings), effective October 11.

Most important of the changes from the standpoint of producers who today are forced to use more overtime labor because of manpower shortage is a provision which permits a producer selling under the "base period" ceilings—the highest prices charged between August 1, 1941, and February 1, 1942—to apply to OPA for permission to add overtime where the maximum price is not sufficient to warrant continuance of production of castings necessary to the war effort.

Another provision of the amendment automatically allows the recovery of overtime premium costs on pre-base period maximum prices. Sellers are not required to file any formal application with OPA for adjustment to include overtime on pre-base period prices.

Southern Hardwood—On recommendation of the WPB, to encourage the production of the thinner sizes of plain red and white oak lumber in the Southern hardwood region, the OPA authorized certain changes in ceiling prices for these species in that region, in Amendment No. 9 to Revised Maximum Price Regulation No. 97—Southern Hardwood Lumber, effective October 11.

In the grades FAS and No. 1 Common and Selects of these species, the following changes in maximum prices per M. b. m. were announced: 1-in. stock—an increase of $4; 1¼-in. stock—an increase of $1; 1½-in. stock—a decrease of $2; 2-in. stock—a decrease of $5.

It is estimated by OPA that these changes will have practically no effect on the over-all sales realization of the producing mills. Furthermore, according to OPA, these price revisions will, in many cases, have the effect of reducing the cost of lumber purchased. Because of the lack of a sufficient quantity of inch and inch-and-a-quarter stock, many purchasers have been buying thicker stock and resawing to fit their requirements for the thinner sizes. To the extent that the supply of inch and inch-and-a-quarter stock is increased, this practice will be curtailed and the ultimate cost of procurement will be reduced.

These changes in ceiling prices are at the lumber producers' level. They will, however, be reflected in maximum prices at all levels, since prices at the distribution yard level are developed by the addition of mark-ups to the base prices of the lumber producer.

The requirements in connection with applications for the approval of maximum prices for "special" grades and items are extended to include the filing with OPA of a certified copy of the order or customer's inquiry, on the basis of which the application has been submitted and a determination of essentiality with respect to the end product for which the "special" item is required. Price approvals, when granted for "special" grades and items, will, in the future, be based on previously-existing differentials between the prices for the "special" items and the related standard grade rule specification.

The purpose of these provisions is to curtail the unnecessary marketing of stock on special specifications.

Steel Castings and Specialties—Railroad specialty producers were authorized by the OPA on October 9, to use their customary transportation charges and allowances in effect on October 1, 1941, in establishing maximum prices for standard railroad specialty products. This authorization is granted in Amendment No. 9 to Revised Price Schedule No. 41 (Steel Castings and Railroad Specialties), effective October 14.

Previously, producers were required to use the same freight provisions for railroad specialties as were used for standard types of side frames, bolsters, couplers and yokes. This change will permit slightly higher transportation charges and allowances in some cases, and slightly lower in others.

The change is being made chiefly to bring the provisions of the regulation in line with customary industry practice with regard to charges and allowances.

GENERAL NEWS

Three Car Subjects Studied at New York

Eastern Car Foremen consider brake beams, snubbers and yard responsibilities

At a well-attended meeting held in New York on October 8, the Eastern Car Foremen resumed their monthly gatherings for the winter season. Three speakers on the program covered various phases of car maintenance which, while always of importance, are particularly so at the present time.

The subject of brake beam failures, causes and cures, was presented by F. R. Carlson, Vice-President, Chicago Railway Equipment Company, Chicago. After directing attention to the fact that very often delays which, at first, are attributed to brake beam failures are found to have resulted from other causes without a record change having been made, Mr. Carlson pointed out that brake beams must be considered as having moving parts which are constantly being subjected to stresses or to the corrosive action of the elements. In time, he said, they must wear out.

"The best formula for reducing brake beam troubles," Mr. Carlson continued, "is to adopt the best possible brake beam equipment. That recommendation goes for good brake shoes, good spring brake-shoe keys, good supports and good parts of all kinds. The brake beam is a most important device on a car. In the location where it is required to function any failure is pregnant with trouble. Hence the brake beam is not only deserving of a daily spot in the limelight of the train-delay reports but it is deserving of every improvement which makes for safety, good braking, or minimized wear. To be sure, even the best beams require vigilance on the part of the inspectors, but beams built to the highest standards do not place upon the inspection forces so great a responsibility that only super-human performance could hope to meet that responsibility.

"Also, we should never forget that a beam once used, repaired, and put back into service will again be subjected to the identical stresses and strains which it had to meet when it was a brand new beam. Accordingly, the material which goes into a rebuilt or repaired beam should be every bit as good as the standard established for new beams. And, in replacing worn out parts, the work of rebuilding and testing should be as carefully and particularly done as when the beam was originally built."

Snubber springs and their relation to hot box prevention was discussed by H. T. Casey, sales engineer, Symington-Gould Corp., New York. After explaining the essential functions of snubbers in breaking up the harmonic action of spring groups and particularly the effect which snubbers have through their action in protecting unsprung car weight—truck frames, brake rigging, brasses, axles and wheels—Mr. Casey indicated that tests had shown a decided reduction in the number of waste grabs on snubber-equipped cars. In one test made on a Class I Eastern road over a three-month period only 123 of 1,135 hot boxes occurred on snubber-equipped cars, a ration of eight to one. The keeping of similar records was recommended to all who had the opportunity to make such a breakdown. Mr. Casey quoted a tank-car fleet owner all of whose equipment is snubber-equipped as follows: "I honestly believe that our records will sustain our claim that snubber springs are one of the biggest factors in obtaining these results." The results referred to were savings of 16.6 cents in maintenance costs to running gear per thousand miles of service.

The final speaker of the evening, H. A. Ryan, general car inspector, D. L. & W., spoke on the preparation of cars at originating terminals. He emphasized the fact that adequate and well-trained supervision was a primary consideration inasmuch as final responsibility rested upon it. After reviewing the changes which have occurred in yard car handling over a period of years, until today a minimum amount of time is allowed for such work, Mr. Ryan concluded with the statement that it is no longer a case of making sure that a car is fit to move from the yard but, so far as is humanly possible, making certain that the car is fit to move to destination.

Development Association Holds War-Time Conference

A war-time conference devoted to a discussion of conditions during and following the war was held by the American Railway Development Association at Chicago on October 14-15. Subjects considered included new industrial uses of agricultural raw materials; land settlement, resettlement and housing for industrial areas; and the production and distribution of food.

Officers elected for the ensuing year are as follows: President, E. J. Leenhouts, general agricultural representative and livestock agent of the New York Central; first vice-president, H. C. Millman, industrial agent of the Pennsylvania; second vice-president, George C. Smith, assistant to the president of the Missouri-Kansas-Texas; and secretary-treasurer, J. B. Lanctot, manager of the department of colonization and agriculture of the Canadian National.

Lackawanna Limited Accident Reported

Fatal collision at Wayland, N.Y., resulted from lax enforcement of rules

The cause of the side collision on the Delaware, Lackawanna & Western at Wayland, N. Y., August 30 was, according to the report of the investigation conducted by the Interstate Commerce Commission, the failure of the road's operating officers "to adhere to and enforce operating rules which are essential to safety."

The circumstances of the accident were described in *Railway Age* of September 4, page 388. It resulted in the death of 26 passengers and a supervisor of locomotive operation and the injury of 107 passengers, 3 Pullman employees, 1 dining car employee and 3 train service employees.

The accident occurred within yard limits on the double track main line of the Lackawanna, where trains moving with the current of traffic are operated by timetable, train orders, and an automatic block and cab signal system. It involved train No. 3, the westbound "Lackawanna Limited," and Extra 1248 West, a freight train which had stopped clear of the main track at Wayland about 4:30 p.m.

At a point 1,362 ft. west of the station at Wayland a lead track connected with several industry tracks joins the westward main track through a trailing point switch of the hand-throw low-stand type. The top of the stand was level with the rail, and it was not fitted with a target or light. During switching operations, the engine and six cars of the freight train moved along the lead track toward the switch. This occurred about 53 min. after this train had reached Wayland, and about 10 min. after No. 3 was due to pass that station.

According to the report of the investigation conducted under the supervision of Commissioner Patterson, the conductor of Extra 1248 had been informed by the dispatcher that No. 3 had passed Bath, a station about 25 miles east of Wayland, about 10 min. late, but he did not give this information to the members of his crew as he expected No. 3 to be practically on time at Wayland. The front brakeman of the freight, who was in the vicinity of the lead track switch, said that he gave signals for the engineer to stop when the engine was about 350 ft. east of the switch, or around 165 ft. east of the clearance point. The engineer, however, thought the switch was lined for his engine to move to the main track, and proceeded until, at a point about

80 ft. east of the switch, he saw the front brakeman's stop signals. He immediately reversed the engine, but it had not had time to get into motion when it was struck by the engine of No. 3.

Approaching Wayland from the east, the tracks are practically level, and a tangent 1.48 miles in length extends to a point west of the station and 582 ft. east of the point of the accident, where a 1 degree curve to the left begins. The authorized speed for No. 3 in this locality is 80 m.p.h., and the train was moving at about that speed when it passed the last automatic signal, 3,200 ft. east of the point of the accident. This signal displayed proceed. The engineer of No. 3, however, made an 8 lb. brake application in the vicinity of the Wayland station to test the brakes. Some 600 ft. west of the station a restricting indication was displayed by the cab signal. The engineer at once moved the brake valve to emergency position, and the speed of No. 3 was reduced to around 50 m.p.h. when the collision occurred.

No. 3 consisted of engine 1151, a mail-baggage car, 2 Pullmans, 4 coaches, a dining car, and 3 coaches, in that order. All cars were of steel construction. As a result of the collision, the locomotive was derailed and badly damaged, coming to rest on its left side. The first six cars were derailed and considerably damaged, and the sixth car came to rest against the side of the derailed and badly damaged freight locomotive in such position that steam and water escaping from broken connections entered the car, causing most of the fatalities that occurred.

After detailing these circumstances, the report points out that the road's rules and timetable provisions require that an inferior train must clear the time of No. 3 at least 10 min. However, it continues, it had been the practice for a considerable time, according to the testimony of officers of the road, for dispatchers to "give time" on first class trains, either orally or by message, instead of issuing train orders, as required by the rules, and without notifying the superior trains that time had been issued against their trains. Under such authority inferior trains had been using the main track on the time of the superior train. Without such authority on the occasion of the collision, the report points out, Extra 1248 was required by the rules to clear the westward main track by 5:03 p.m., since no train order had been issued restricting the authority of No. 3, yet it fouled the main track at 5:23 p.m., when the accident occurred.

"This accident," the report concludes, "was the direct result of the long-standing practice of inferior trains using the main track on the time of superior trains without procuring authority in the manner prescribed in the book of operating rules. The rules had not been rescinded or modified, but practices not provided for or authorized thereby were commonly followed. Operating officials are responsible for such practices. If they had conformed to the practices prescribed by the rules, the crew of the inferior train in this case would not have permitted their train to foul the main track on the time of No. 3 without protection. Similar accidents may be expected to occur as long as operating officials fail to conform to the practices prescribed by their rules. The unsafe conditions disclosed by this investigation should be corrected immediately."

General Chairmen of Big Five Consider Wage Award

The 600 general chairmen of the five transportation brotherhoods convened at Chicago on October 22 to decide whether to accept or reject the 4-cent an hour increase in pay recommended by an emergency board, as reported in the *Railway Age* of October 2.

Another Proposed Revision of Civil Aeronautics Act

Representative Reece, Republican of Tennessee, has introduced H. R. 3491 which proposes a comprehensive revision of the Civil Aeronautics Act. Another proposed revision of the act, H. R. 3420, was introduced previously by Chairman Lea of the House committee on interstate and foreign commerce, as noted in the *Railway Age* of October 16, page 621. Mr. Reece's bill is understood to embody views of the committee minority on the matter.

House Approves Investigation of Air Commerce

The House on October 19 approved House Resolution 307 which authorizes its committee on interstate and foreign commerce "to conduct an investigation and study of such matters related to the present and probable future conditions and developments in and affecting air navigation and domestic and foreign air commerce as it may deem advisable." The resolution was sponsored by Representative Bulwinkle, Democrat of North Carolina.

New Officers for Welding Society

At the conclusion of the 24th annual meeting of the American Welding Society, Hotel Morrison, Chicago, October 18-21. the following officers were elected for the 1943-44 season: President, David Arnott (American Bureau of Shipping, New York, N. Y.); first vice-president, Isaac Harter (vice-president, Babcock & Wilcox Co., Barberton, Ohio); second vice-president, A. C. Weigel, (vice-president, Combustion Engineering Co., Inc., New York); District vice-presidents and directors-at-large were also named.

Railroads' Fare Increase in New York City Upheld

On October 14, the New York State court of appeals unanimously held the New York Central, the Long Island and the Staten Island Rapid Transit entitled to a 10 per cent increase in non-commutation passenger fares in New York City under a January 21, 1942, order of the Interstate Commerce Commission. The decision reversed a lower court ruling sustaining an action by the Transit Commission to prevent the railroads from putting the increase into effect in intra-state fares. It was contended that when the carriers increased interstate fares effective February 10, 1942, in accordance with the I.C.C.'s order, they were required to increase intrastate fares also to avoid discrimination against interstate commerce.

Examiner Suggests a Way Out of Stock Yards Controversy

The Livestock Terminal Service Co. of Cleveland, Ohio, should be authorized by the Interstate Commerce Commission to abandon the operation of loading and unloading facilities at the Cleveland Union Stock Yards, according to the recommendation of Examiner Ralph R. Molster, provided that the commission is given "proper assurance" that no interruption in the use of the stockyard's facilities will occur. The proposal is contained in a proposed report in the commission's Finance Docket 14038.

A "practicable" means to assure continuous operation of the unloading facilities, the examiner suggests, would be for the railroads serving the stockyards to take over joint control of the service company, now privately owned. At any rate, he remarks, "the railroads and the stockyards company promptly should enter into an arrangement for continuation of the service *for* the railroads *by means* of the existing facilities," subject to the commission's approval.

These conclusions of the examiner were developed from a consideration of several proceedings before the commission now or in the past in which the "common carrier" operations of unloading livestock at the Cleveland yards are involved. One is Ex Parte 127, in which the commission undertook to determine the common carrier status of various stockyards' operators, which investigation led to the formation of the service company for the purpose of assuming the common carrier operations of the Cleveland Union Stock Yards and thereby relieving that company from taxation under the Carriers Taxing Act.

Ex Parte 127 has been reopened for further consideration of the Cleveland situation, the examiner points out, but he does not accept the contention of protestants that a decision on the abandonment application should be deferred until the final settlement of that question. The only effect of such a delay, he says, "would be to prolong the struggle between the stockyards company and the railroads, and add to the maze of tactical maneuvers to which each side has had resort." The stockyards company would "view with alarm" the prospect of taxation under the Act, he says, and the railroads are not in a position to perform the loading and unloading services, "yet no need seems to exist for preserving, between these interests, a victim who, if extremely accommodating, ostensibly has been placed in a position of financial jeopardy through no fault of his own."

The examiner stresses his opinion that there is involved "grave confusion as to the difference between carrier *status* under the Interstate Commerce Act and carrier *responsibility*. . . . Carriers may not divest themselves of their *duty* to the public at will." Therefore, he continues, if the

service company is permitted to abandon operation, then the duty to perform the unloading service would fall upon the stockyards company, but if the stockyards company should seek and obtain authority to abandon such operation, then the duty to furnish it would devolve upon the railroads.

This conclusion the examiner considers to be clearly evident in the commission's findings in Ex Parte 127, in its No. 28421 proceedings, and others, yet, he remarks, even in view of present war-emergency conditions, "the parties concerned have adopted a cavalier attitude toward this consideration of paramount public welfare," with the service company declining any responsibility or knowledge of what may happen if it is permitted to abandon operation of the unloading facilities, and the stockyards company signifying "a complacent willingness" that the application be approved, under the "illusion" that its responsibility ended on the date that the service company began operations.

Nine Months Ton-Miles 17 Per Cent Above Last Year

Class I railroads handled about nine per cent more ton-miles of revenue freight in September than in the corresponding month of 1942, according to a preliminary estimate prepared by the Association of American Railroads.

In the first nine months of 1943, Class I roads performed approximately 17 per cent more revenue ton-miles of service than in the same period of 1942, 58 per cent more than in the same period of 1941, and 131 per cent more than in the first nine months of 1939.

The following table summarizes revenue ton-mile statistics for the first nine months of 1943 and 1942:

	Revenue Ton-Miles of Freight		Per Cent Increase
	1943	1942	
7 Months	413,697,402,000	347,112,442,000	19.2
Aug.[1] ...	64,500,000,000	58,626,310,000	10.0
Sept.[2] ...	63,400,000,000	58,155,496,000	9.0
9 months	541,597,402,000	463,894,249,000	16.8

[1] Revised estimate
[2] Preliminary estimate

Lets Union Tank Affiliate Extend Lease of Trucker

The Interstate Commerce Commission has issued a third supplemental order in the No. MC-F-1936 proceeding, authorizing an extension to December 16 of arrangements whereby Refiners Transport & Terminal Company, subsidiary of the Union Tank Car Company, is leasing motor-carrier operating rights and property of Marshall Transport Company and certain property of Warren C. Marshall. This is the proceeding wherein the commission reversed Division 4's approval of the acquisition of the Marshall rights and property by Refiners, ruling that non-carrier parent corporations (Union Tank in this case) of motor carriers must become parties to applications wherein their carrier subsidiaries are seeking commission approval of plans to acquire rights and property of other highway carriers.

The commission's report was reviewed in the *Railway Age* of August 21, page 322. When Union failed to file an application within 20 days, the commission followed through with an order dismissing Refiners' application (see *Railway Age* of September 11, page 430). The case has been taken to the courts, and the commission's action authorizing extension of the lease, which would have expired October 17, was in response to a petition filed by the parties.

Railroad Committee on Air Transport Policy

Eleven railroad presidents have been appointed by the board of directors of the Association of American Railroads as a committee to consider broadly the subject of what the railroad policy should be with respect to entering the field of air transportation. Discussion of the subject with representatives of the air lines is expected to be among the committee's activities.

The eleven railroad presidents comprising the committee are: F. E. Williamson, New York Central; E. S. French, Boston & Maine; R. B. White, Baltimore & Ohio; M. W. Clement, Pennsylvania; E. E. Norris, Southern; C. McD. Davis, Atlantic Coast Line; J. L. Beven, Illinois Central; E. J. Engel, Atchison, Topeka & Santa Fe; L. W. Baldwin, Missouri Pacific; W. M. Jeffers, Union Pacific; Ralph Budd, Chicago, Burlington & Quincy.

"Olympian" Derailed

All of the cars of the 12-car coach section of the eastbound "Olympian" of the Chicago, Milwaukee, St. Paul & Pacific were derailed at Paragon, Mont., about 10 miles west of Miles City, at 5:40 a.m. on October 14, when the embankment over which the train was passing, slid as the train came into a curve. Five persons were seriously injured and 60 others received scratches and bruises. The line at this point was built in 1906, parallel to and about 200 feet from the Yellowstone river. The fill consists of strata of several kinds of soil which have stayed in place for 37 years. The slide occurred at the base of the embankment as the tender of the locomotive was passing over the embankment. Some of the cars came to rest at the base of the embankment when the earth first started to move while others followed several minutes later as sliding continued.

Senate Bills to Amend Pension and Unemployment Acts

Four bills have been introduced in the Senate by Senator Pepper, Democrat of Florida, to provide for exemption from the railroad retirement and unemployment insurance systems of any municipality operating "not more than one switch engine on its own tracks as a plant facility within its single restricted municipal wharf area." The bills are S.1442 to amend the Internal Revenue Code; S.1443 to amend the Carriers Taxing Act; S.1444 to amend the Railroad Unemployment Insurance Act; and S.1445 to amend the Railroad Retirement Act.

As noted in the *Railway Age* of September 25, page 500, similar bills were previously introduced in the House by Representative Price, Democrat of Florida.

Florida Canal Bill

Representative Hendricks, Democrat of Florida, has introduced H. R. 3448 to provide for the construction of the proposed Florida Barge Canal. The bill would authorize an appropriation of $44,000,000 for the project.

September Operating Revenues 10.7 Per Cent Above 1942

From preliminary reports of Class I roads representing 81.3 per cent of total operating revenues, the Association of American Railroads this week estimated that railroad operating revenues in September were $628,491,241 compared with $567,493,887, an increase of 10.7 per cent.

Estimated September freight revenues were $466,574,028 compared with $443,381,107, an increase of 5.2 per cent. Estimated passenger revenues totaled $117,717,132 compared with $85,747,233, an increase of 37.3 per cent.

Offer to Alter Facilities Makes Switching Allowance O. K.

Passing upon a situation wherein a railroad prefers to pay an allowance rather than perform certain switching services at a plant which offered to qualify for such services under the line-haul rates by rearranging its facilities, the Interstate Commerce Commission has sanctioned payment of the allowance. The decision came in Division 3's report on reconsideration of that phase of the Ex Parte 104 proceeding which involves Southern Pacific and Western Pacific services at the Westwood, Calif., plant of the Red River Lumber Company.

In the prior report the Division had disapproved the allowance, following the general rule developed in Ex Parte 104 to the effect that a railroad has the right to elect whether or not it will do terminal work normally called for under its line-haul rates, and if it is prevented from so doing by conditions within the shipper's plant . . . it is deprived of election, in which case its obligation under the line-haul rates would be met by offering to receive and deliver shipments at some reasonably convenient point.

The lumber company did not question this rule, but offered to alter its facilities so as to eliminate the obstacles which were held in the prior report to be a bar to the allowance. The railroads, however, asserted that even with full and free access to the plant they would "much prefer to have the lumber company continue to switch cars to and from its plant, and pay it an allowance, rather than to perform the service themselves."

Hence the commission sanctioned the allowance under the present set-up of plant facilities, saying: "There is no good reason why the lumber company should be required to spend the time and money, and

consume the vital materials necessary to rehabilitate its plant tracks so as to accord respondents access to the plant, when they do not desire to perform the service themselves and would, after such rehabilitation is accomplished, have the lumber company continue to perform the service and pay it an allowance therefor.

Commissioner Miller dissented. "By approving the allowance to the lumber company," he asserted, "we are in fact requiring respondents to pay for a service which on this record it is conceded that the lumber company does not desire the respondents to perform or that the respondents could perform even though the tracks were rehabilitated."

Freight Loss and Damage Up

Freight loss and damage claims paid by the railroads during the first six months of 1943 increased 20.4 per cent as compared with the same period of 1942, or from $15,572,717 to $18,744,123. For the 12 months ended with June 1943, loss and damage totaled $36,519,649 compared with $28,418,910 for the same period a year ago, an increase of 28.5 per cent. Unlocated damage of freight in packages accounted for 42.7 per cent of the total claims paid while concealed damage and unlocated damage of freight not in packages accounted for 13.8 and 13.2 per cent respectively.

New Entrants to Railroads Industry Set Record

New entrants to the railroad industry in 1941 were more numerous than in any of the preceding years for which the Railroad Retirement Board has records, according to the monthly review of the board for September. In that year, 525,200 new workers were hired, compared with 239,300 in 1940.

Very young people were hired in larger numbers in 1941 than in the preceding year, 15.7 per cent of those who entered for the first time being under 20 years of age compared with 12.1 per cent in 1940, the report continues. There was also a relative increase among those from 40 through 49 years of age but the proportion of new entrants in the 20-29 group showed a decline probably because of the draft.

On Class I railroads, nearly three-fourths of the newcomers were shop, road or station laborers and almost one-third of them were extra-gang men, the review states. About 22 per cent of the helpers and apprentices were new entrants, as were 17 per cent of the firemen and brakemen. In the engineer and conductor group, less than 1 per cent were new.

Job placements in August, the board reports, numbered 36,090 persons, an increase of 23 per cent over those in July. Placements in the station and platform occupations, of which freight handlers are a part, increased 169 per cent. Mexican workers imported during August numbered 2,721 and at the end of August, 14,600 were in service.

An increase in retirements from the railroad industry was reflected in the 1,764 employee annuities certified in August, the number being more than in any one month in over two years, the report said. Applications for annuities were also still well above the level of a year ago, although the number received, 1,745, was under the July figure.

Benefit payments increased and reached $11,183,000 for the month. The largest share, $9,169,000, went to employee annuitants, $1,396,000 to pensioners, and $618,000 to survivors. Monthly benefits amounting to $10,356,000 were in force at the end of the month.

Freight Car Loading

Loadings of revenue freight for the week ended October 16 totaled 912,328 cars, the Association of American Railroads announced on October 21. This was an increase of 6,052 cars or 0.7 per cent above the preceding week, an increase of 11,077 cars or 1.2 per cent above the corresponding week last year, and a decrease of 10,556 cars or 1.2 per cent below the comparable 1941 week.

Loading of revenue freight for the week ended October 9 totaled 906,276 cars and the summary for that week as compiled by the Car Service Division, A. A. R., follows:

Revenue Freight Car Loading

For the Week Ended Saturday, October 9			
District	1943	1942	1941
Eastern	170,058	162,649	184,753
Allegheny	192,270	187,320	192,787
Pocahontas	55,550	55,016	60,240
Southern	122,622	126,761	127,262
Northwestern ..	152,193	153,477	141,089
Central Western	138,565	145,198	137,200
Southwestern ..	75,018	78,829	60,546
Total Western Districts	365,776	377,504	338,835
Total All Roads	906,276	909,250	903,877
Commodities			
Grain and grain products	59,521	51,073	36,553
Live stock	22,059	22,508	20,226
Coal	179,333	167,158	171,699
Coke	14,712	14,456	13,154
Forest products.	45,472	49,474	44,832
Ore	81,099	78,856	64,096
Merchandise l.c.l.	102,843	92,776	160,718
Miscellaneous .	401,237	432,949	392,599
October 9	906,276	909,250	903,877
October 2	910,643	907,286	917,896
September 25 ..	907,311	897,427	919,794
September 18 ..	902,766	903,099	907,969
September 11 ..	834,671	814,897	914,656
Cumulative Total 41 Weeks ...	33,321,616	34,056,360	33,089,522

In Canada.—Carloadings for the week ended October 9 totaled 73,472 compared with 74,162 cars for the previous week and 73,952 for the corresponding period last year, according to the compilation of Dominion Bureau of Statistics.

Total for Canada	Total Cars Loaded	Total Cars Rec'd from Connections
Oct. 9, 1943	73,472	38,092
Oct. 2, 1943	74,162	39,212
Sept. 25, 1943	72,255	38,142
Oct. 10, 1942	73,952	36,113
Cumulative Totals for Canada		
Oct. 9, 1943	2,666,537	1,538,037
Oct. 10, 1942	2,634,129	1,383,812
Oct. 11, 1941	2,468,156	1,207,055

Forwarder Gets Permit Covering Suspended Water Routes

Because it feels justified "in placing a liberal interpretation on the provisions of the act when considering operations which have been disrupted because of the national emergency," the Interstate Commerce Commission has reversed its Division 4 to grant a forwarder permit covering operations from East-coast ports to Gulf ports over water lines whose services have been suspended because of the war.

The report on reconsideration in FF-29 gives the permit to Pan-Atlantic Carloading Dispatch Service, Inc., for operations as a freight forwarder of general commodities from points in Connecticut, Delaware, Maine, Massachusetts, Maryland, Michigan, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, Virginia, West Virginia, and the District of Columbia to points in Alabama, Arizona, Arkansas, Florida, Louisiana, Mississippi, New Mexico, Oklahoma, Tennessee, and Texas.

In acting thus, the commission had to find that Pan-Atlantic was "ready, willing, and able" to perform the services for which the authority was sought. It led up to the finding with this comment: "The interruption of service was an interruption beyond the control of applicants. The suspension of service by the water carriers has been found by us to be an interruption beyond their control and has not affected their right to resume operations under Part III of the act. . . . Such water carriers will no doubt resume operations after the termination of hostilities. While it is clear, as found by Division 4, that applicants are not now in a position to perform services subject to the act solely because steamships are not being operated, it is equally clear that they are ready, willing and able to perform such services as soon as the ocean steamships are permitted by the government to resume normal operations."

Commissioner Mahaffie filed a brief dissent to which Commissioners Rogers and Patterson subscribed. It was his view that the commission should have found itself unable at this time to make the required findings for the grant of a permit. He said: "However ready and willing applicant may be, it is not *able* to operate now, and from what is shown upon the record before us there is no indication of any definite date in the future when it will be able to operate as a freight forwarder as defined in the act."

Package Car Service Out of Chicago Increased

The Office of Defense Transportation on October 11 authorized the railroads to add 92 cars to their package car service from Chicago. These 92 cars will operate from Chicago to points in Kentucky, Tennessee, Mississippi, Georgia, Alabama, and Florida which are east of the Mississippi river; and to points west of Chicago excepting in Washington and Oregon.

The action restores 92 of the several hundred package cars which the railroads discontinued 15 months ago upon orders from the O. D. T. The restoration follows months of study of the movement of less-than-carload freight and it is expected that the added cars will expedite the delivery of light shipments, will eliminate the handling of traffic at intermediate points and contribute to the conservation of manpower.

The increased volume of less-than-carload traffic during the 15 months and the shortage of manpower at transfer stations, ac-

cording to the Chicago Association of Commerce, have indicated that conservation of equipment as well as manpower can be brought about through the re-establishment of some cars, even though not loaded to the full 10-ton requirement specified in General Order O. D. T. No. 1. In the study that followed, the association stated, the flow of merchandise in the direction of the general flow of empty equipment was investigated to determine the extent to which traffic moving in the same general direction could be divided and loaded to points beyond heavy transfer stations.

Fuel Saving in Canada

The Canadian Pacific and Canadian National have taken measures in coal conservation as a result of the fuel emergency declared by the Dominion government.

With the bulk of its saving to be made in the operation of locomotives and trains, together with the heating of cars in transit and in terminal coach yards, the Canadian Pacific hopes to save 500,000 tons of coal during the coming months, one-tenth of its annual consumption.

W. M. Neal, vice-president, has released detailed instructions to employees, urging them to dress more warmly and carry the conservation plan into their nearly 70,000 homes, with technical experts offering advice on extending the efficiency of heating units.

Since 1932, there has been an annual saving of 35,000 tons in boiler plants alone, but with the new response o he government's declared fuel emergency, an additional 15,000 tons will be saved. Eighty-seven per cent of the Canadian Pacific's annual coal purchase is for transportation use, the balance going to its hotels, stations and office buildings.

The Canadian National, according to R. C. Vaughan, chairman and president, has begun production of fuel oil for its locomotives on a 620-acre tract at Vermillion, Alta. There are to be 50 wells, with 20 already drilled, and 10 of them now producing 350 bbls. a day. "We are opening the wells," declared President Vaughan, "as a war-time measure of precaution to secure an adequate supply and reserve of fuel oil for the railway's western services." At present traffic levels, the railroad uses 1,050,000 bbls. a year in western Canada.

Equipment on Order

Class I railroads on October 1, had 28,896 new freight cars on order, according to the Association of American Railroads. On the same date last year they had 36,437 on order.

The former figure included 7,008 plain box, 2,825 automobile box, 3,294 gondolas, 12,812 hoppers, 1,200 refrigerator, 200 stock, and 1,557 flat cars.

Railroads also had 1,067 locomotives on order on October 1, which included 468 steam, three electric, and 596 Diesel-electric locomotives. On October 1, 1942, they had 840 locomotives on order which included 314 steam and 526 electric and Diesel-electric.

Class I roads put 20,432 new freight cars in service in the first nine months of 1943, compared with 56,081 in the same period last year. Those installed in the nine months of this year included 9,621 hopper, 7,721 gondola, 2,085 flat, 135 automobile box, 816 plain box, four refrigerator, three stock, and 47 miscellaneous freight cars.

They also put 483 new locomotives in service in the first nine months this year, of which 298 were steam, 15 electric, and 170 Diesel-electric. New locomotives installed in the same period last year totaled 575, of which 232 were steam and 343 were electric and Diesel-electric.

The Office of Defense Transportation also reported 50 new locomotives on order on October 1, and 18 new locomotives installed in the first nine months of this year by other than Class I carriers. This brings the total of new locomotives on order on October 1 to 1,117 and the number installed in the first nine months to 501.

Squire Confirmed for Railroad Retirement Board

The Senate on October 15 confirmed President Roosevelt's appointment of Frank C. Squire, valuation engineer of the Finance, Accounting, Taxation and Valuation Department of the Association of American Railroads, to be railroad management's representative on the Railroad Retirement Board. As noted in the *Railway Age* of October 9, page 578, Mr. Squire succeeds M. Roland Reed, Pennsylvania mechanical department officer, who has served on the R. R. B. since October, 1938.

Mr. Squire was born May 16, 1885, at Oil City, Pa., and received his higher education at Stanford University, being graduated in 1907 with an A.B. degree. In the same year he entered railroad service as an assistant engineer, serving until 1912 with the Oregon-Washington Railroad & Navigation Company (now Union Pacific) and with the Southern Pacific. From 1912 until 1914 he was valuation engineer with the Los Angeles & Salt Lake (now U. P.), and from 1914 until 1923 (except for military service in 1918) he held a like position on the O.-W.R.&N. In 1923 Mr. Squire joined the Western Group of the Presidents' Conference Committee on Valuation as engineer, remaining in that position until 1935 when he became associated with the A.A.R. as valuation engineer, the position he was holding at the time of his appointment to the Retirement Board.

F. C. Squire

Senate Confirms Nelson Lee Smith for Power Board

The Senate on October 15 confirmed President Roosevelt's appointment of Nelson Lee Smith, chairman of the Transportation Board of Investigation and Research, to be a member of the Federal Power Commission for the remainder of a term expiring June 22, 1945. He succeeds the late Clyde L. Seavey.

Mr. Smith will assume his new duties on October 25. His photograph together with a sketch of his career appeared in the *Railway Age* of September 18, page 464. As there noted, he was formerly chairman of the New Hampshire Public Service Commission; and he was the only one of the three original appointees to B. I. R. who actually became a member when the board was finally organized nearly a year after the enactment of the Transportation Act of 1940.

M. P. and T. & P. Organize Eagle Air Lines, Inc.

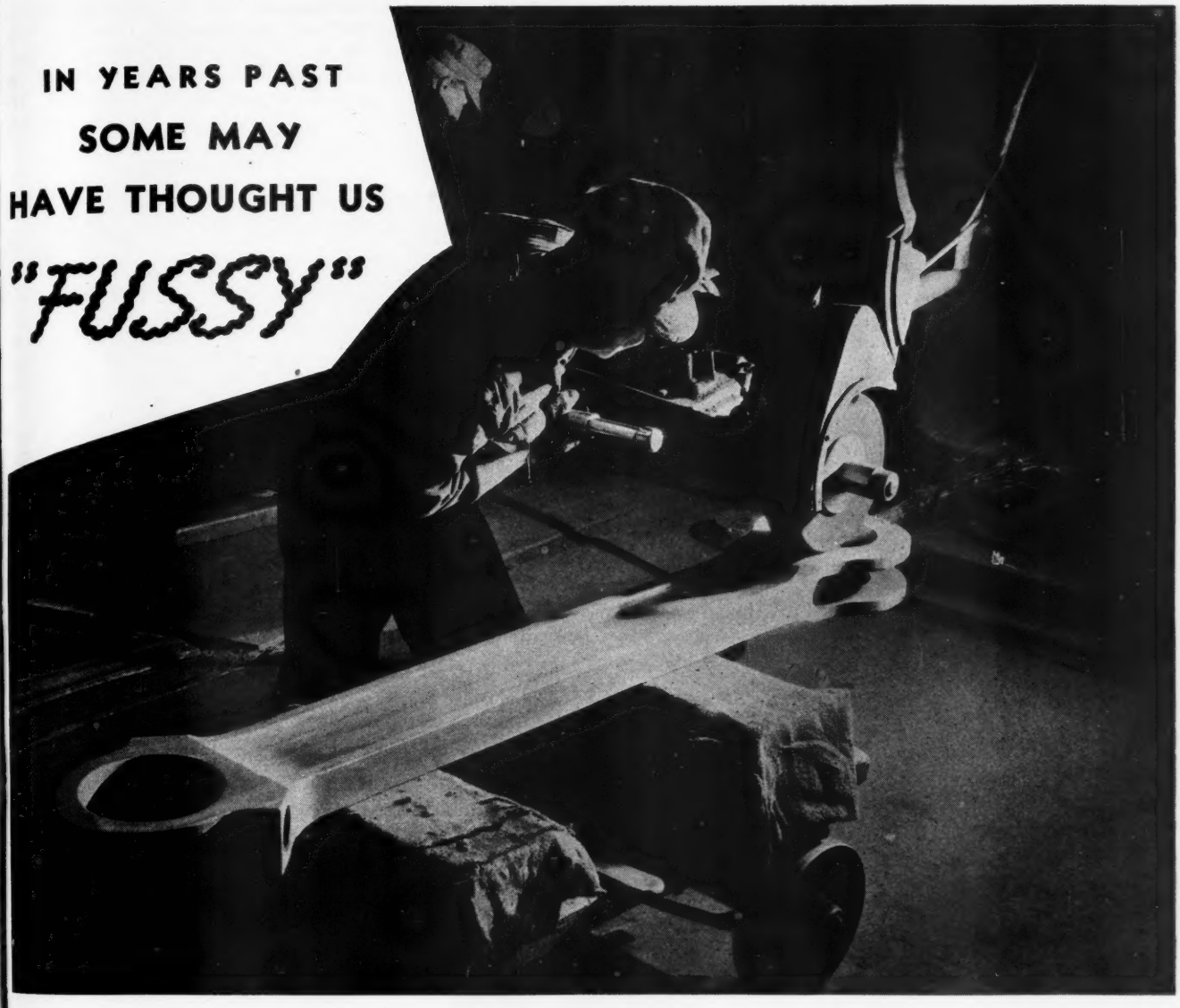
Authority to handle airborne freight and passenger commerce over a 6,000-mile network, the interlacing and interconnecting routes of which parallel primary traffic arteries of the Missouri Pacific and the Texas & Pacific in nine mid-Western, Southern and Southwestern states, has been asked in a petition filed with the Civil Aeronautics Board by Eagle Airlines, Inc., newly-created subsidiary of the two railroad companies. The proposed airlines system would link 108 cities, embrace local service on 16 separate local routes, and afford through service as warranted between cities served by one or more of the routes. Plans of the subsidiary also contemplate through service to the Eastern Seaboard, the Pacific Coast, Mexico and Northern points by connection with other airline services at its terminal gateways, such as St. Louis, Memphis, New Orleans, Brownsville, Laredo, El Paso, Pueblo and Omaha.

It is proposed to use aircraft of types most suitable or adaptable to the service to be performed, employing both helicopter and more conventional type aircraft. The Eagle Airlines proposes to commence operations as soon as equipment, personnel and facilities can be procured.

Five basic types of service are proposed, these being through co-ordinated air-highway service, through co-ordinated air-highway-rail service, through co-ordinated air-rail service, through and feeder service to and from connections with other carriers, and local and through air service.

A statement issued by the newly formed company said the decision of the two railroads to form the Eagle Airlines reflects their desire to provide a complete transportation service. "The war is making a vast portion of the public air-minded," the statement said, "and it is felt a consider-

News Department continued on next left-hand page



BUT WE DON'T THINK THEY DO, TODAY!

In the belief that no railroad could ever get more out of a locomotive than had been built into it by its maker, we have always insisted on the very highest standards in our design, our workmanship, and our selection of materials. We have carried our care in these regards to a degree which may have caused some to consider us over-careful—even 'fussy'.

But today, with war traffic stressing all rolling stock close to its limit of endurance, Lima-built locomotives are proving the value of Lima's unceasing search for perfection. Long are the miles and heavy the load, but Lima-built Modern Super-Power Steam Locomotives have what it takes to 'take it'—and they're proving this from coast to coast.

LIMA LOCOMOTIVE WORKS — LIMA LOCOMOTIVE WORKS INCORPORATED — INCORPORATED, LIMA, OHIO

able number of railroad patrons may prefer to make at least some of their peace-time trips by plane and also that some shippers will want to send a portion of their freight shipments by air.

"The proposed routes are intended to supplement present rail and highway service," the statement continues. "Our railroads believe there will be an increasing demand for co-ordinated transportation and that it is their obligation to be in position to provide the public with the best and cheapest kind of transportation it desires."

Although the planes will be operated by a separate corporation, it is intended to utilize the existing traffic, accounting and other personnel, as well as offices and station facilities of the railroads. Present truck and bus equipment will be used, wherever feasible, in transporting freight, mail, express and passengers between air fields and rail stations.

It is felt the inauguration of air service will contribute materially to giving employment to men returning from the armed services when peace is won. Many men furloughed for war service are now serving in army, navy or marine air corps and will return well trained for employmeint in the new service branch contemplated by the railroads.

Eagle Airlines, Inc., has been organized under the laws of Delaware, and will be jointly owned by the Missouri Pacific and the Texas & Pacific. If the necessary authority is obtained from federal and state regulatory bodies, it is proposed to commence operations as soon as practicable.

Club Meetings

Col. W. J. Williamson, chief of Traffic Control division, U. S. A. T. C., Washington, D. C., will discuss the U. S. Army Transportation Corps at the next meeting of the Central Railway Club of Buffalo, to be held November 11, 8 p. m., in the Main Ball Room, Hotel Statler.

"A Railroad Is No Better Than Its Supervision" is the title of an address to be presented by C. M. House, superintendent, motive power and equipment, the Alton, at the annual "honor night" meeting of the Car Department Association of St. Louis, November 16, 8 p.m., Hotel DeSoto.

President's Fair Employment Group Gets New Head

Announcement was made October 15 of the appointment of Malcolm Ross to succeed Msgr. Francis J. Haas as chairman of the President's Committee on Fair Employment Practice. Mr. Ross had been deputy chairman of the committee. The resignation of Msgr. Haas was reported in *Railway Age* of October 9, page 570.

Date of Through Routes Order Again Postponed

The Interstate Commerce Commission has further postponed from November 27 to December 17 the effective date of its order in the No. 28647 proceeding. This is the case wherein the commission interpreted the Transportation Act of 1940's through-routes provisions, claiming authority thereunder to prescribe through routes that short-haul participating railroads if it determines that better service to shippers would result. As noted in the *Railway Age* of October 16, page 614, the commission recently denied railroad petitions for reconsideration of its findings.

Supply Trade

Harry A. Erb has joined the **Worthington Pump & Machinery Corporation** as service manager of its Moore Steam Turbine division, Wellsville, N. Y.

Lionel M. Searle, for the past year manager of the Monroe street plant of the Simplex Radio division of the **Philco Corporation,** Sandusky, O., has been appointed manager of the entire division.

M. N. Trainer has been elected first vice-president of the **American Brake Shoe Company.** Mr. Trainer has been a vice-president of Brake Shoe since 1933, and president of the company's Brake Shoe and Castings division since 1939. He was graduated from the University of Pennsylvania in 1910, and joined the Brake Shoe Company in 1916 as a brake shoe inspector. He subsequently was transferred into sales and sales engineering service and in 1926 was appointed vice-president of the American Malleables Company and of the American Brake Materials Company.

M. N. Trainer

J. G. Graham, manager of railway sales for the **Oliver Iron & Steel Corporation,** has been appointed a member of the rails and accessories industry advisory committee of the War Production Board.

The **Elastic Stop Nut Corporation of America** has been cited for engineering and production achievements during a critical period in the manufacture of tanks, from August 3, 1942 to March 31, 1943, by the Ordnance Department Industry Integration Committee for Tank Tracks.

John S. Hutchins, district sales manager of the **Ramapo-Ajax division of the American Brake Shoe Company,** with headquarters at Chicago, has been elected vice-president of this division with the same headquarters. Mr. Hutchins was born in 1905 and was graduated from Yale University. He entered the employ of Ramapo-Ajax in 1925 and was taken into the sales department in Chicago in 1927. He was later transferred to the Cleveland office and returned to Chicago in 1933, where he remained in charge of sales of the Chicago district until his appointment as district sales manager of middle Western sales in 1941.

John S. Hutchins

The **A. C. F. Shipyard** has been granted a renewal of its Army-Navy "E" award for continued production achievement and with it the right to add a third white star to its banner.

R. H. McCormick, formerly advertising manager of the Vascoloy-Ramet Corporation, has been appointed advertising manager of the **American Hoist & Derrick Co.**

Edward Kopper, vice-president of the **Gould Storage Battery Corporation,** has resigned to become vice-president of the **Peerless Equipment Company,** Chicago. Mr. Kopper was born at St. Paul, Minn., on November 27, 1890, and was graduated from the University of Minnesota in 1913. After graduation, he was employed in the engineering and production departments of

Edward Kopper

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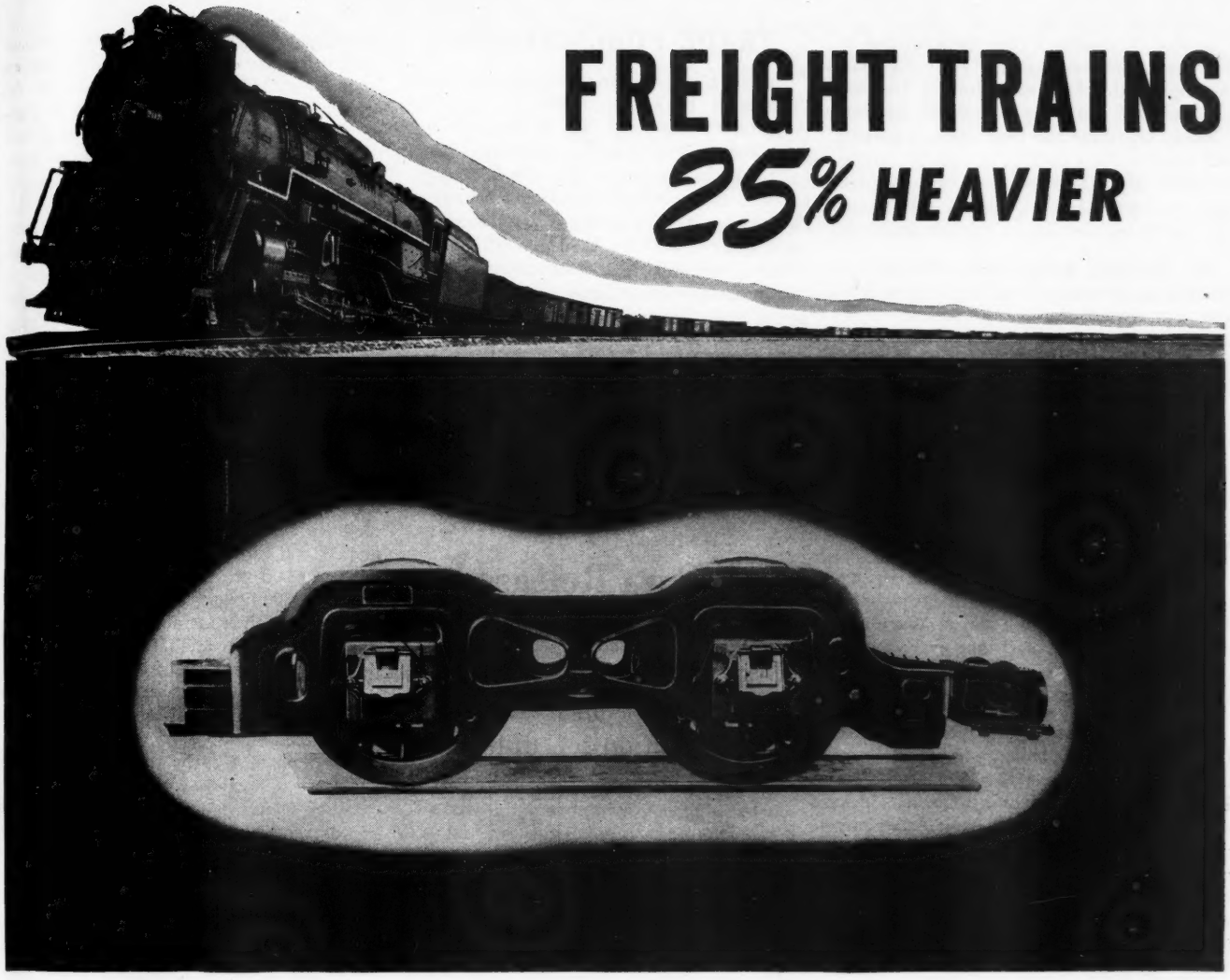

FREIGHT TRAINS 25% HEAVIER

With wartime net ton-miles running some 25% above those of a year ago — and 130% above pre-war figures — those railroads with Booster equipped locomotives are enjoying convincing evidence of their ability to handle heavy loads under difficult conditions. The Locomotive Booster adds the equivalent in tractive effort of another driving axle to aid in starting and accelerating heavy loads and to help on grades and in tight places.

FRANKLIN RAILWAY SUPPLY COMPANY, INC.

NEW YORK • CHICAGO

In Canada: FRANKLIN RAILWAY SUPPLY COMPANY, LIMITED, MONTREAL

a number of manufacturing concerns and in 1919 was appointed assistant superintendent of shops of the American Hoist & Derrick Co., St. Paul. Later he established his own business, handling the sales of railway and mill supplies for a number of manufacturers. In 1931, he went with the Gould Storage Battery Corporation as railway sales manager and later was elected vice-president.

The **Baldwin Locomotive Works** has retained a national engineering firm to prepare a program of post-war activity looking to the improvement of its present products and the development of new products in the heavy industry field.

Paul E. Floyd, who has been on leave of absence in the iron and steel branch of the War Production Board, has resumed his former position as district manager in the Chicago branch office of the **Allegheny Ludlum Steel Corporation.**

E. A. Murray, supervisor of the Priorities division of the Cleveland general sales office of the **American Steel & Wire Co.** has been appointed assistant manager of the manufacturers sales department in the Chicago sales office of this company.

Peter L. Lenz, formerly manager of the Pittsburgh, Pa., homewood manufacturing and repair plant of the **Westinghouse Electric & Manufacturing Co.,** has been appointed manager of the Middle Atlantic district manufacturing and repair department with headquarters in Philadelphia, Pa. His new duties will include general supervision of two manufacturing and repair plants in Philadelphia and one each in Wilkes-Barre, Pa., Huntington, W. Va., and Baltimore, Md.

William S. Richardson, general manager of industrial products and sundries sales for the **B. F. Goodrich Company,** has been appointed head of the company's newly-created chemicals division. **Arthur Kelly,** who has been with B. F. Goodrich in diversified activities since 1925, has been appointed assistant works manager, and **E. F. Tomlinson,** who has been engaged in war activities in the sales and service division, has been appointed general manager of the company's industrial products sales division.

T. McGahan has been appointed vice-president and general manager of sales, and **A. E. Klieves,** vice-president in charge of operations, of the Boyle Manufacturing division of the **United States Steel Products Company. J. A. Connelly** has been appointed vice-president and general manager, and **William I. Hanrahan,** vice-president of the company's Petroleum Iron Works division. Temporary executive offices will be established by the United States Steel Products Company at 30 Rockefeller plaza, New York, on November 1.

OBITUARY

G. L. L. Davis, vice-president in charge of sales of the Scullin Steel Company, died October 5. He was 67 years of age. Mr. Davis had been associated with the Scullin Steel Company since 1910.

TRADE PUBLICATIONS

BRAKE BEAM SUPPORT.—Under the title "Universal Brake Beam Safety Support-Adjustable," the Grip Nut Company, Chicago, has recently issued an illustrated four-page bulletin which describes this device and explains the principal operating advantages claimed for it. The company also furnishes, upon request a 17-in. by 24-in. wall chart which gives illustrated instructions for the proper installation and maintenance of Universal brake beam safety supports.

Equipment and Supplies

More Cars Released From 1944 Steel

Advanced car authorizations aid builders in planning production schedules

The Office of Defense Transportation is reported to have drawn upon authorized advanced allotments of steel for the first six months of 1944 to release 8,467 new freight cars, of which 5,762 were authorized for building out of steel allotted for the first quarter of next year and 2,705 out of steel allotments for the second quarter. Additional cars will be scheduled upon additional authorization being received for materials for this period, both from the current backlog of cars on order but not yet authorized for building and from a number of new orders now pending.

The practice of allocating new car construction in advance from future materials' allotments under the War Production Board's controlled materials plan is designed to aid car-building plants in planning production schedules and also to hold down the accumulation of a large backlog of unauthorized orders. Breakdown of the 8,467 cars newly released by railroads, number, type and builder is shown in the accompanying table. The authorizations for the building of the majority of these cars previously had been reported individually from time to time in the Equipment & Supplies column of the *Railway Age.*

Most of the 5,762 cars released for the first quarter, 1944, or 3,052, are scheduled for construction in railroad shops, including 800 box, 1,800 hopper, and 350 gondola cars, and 102 cabooses. The remaining 2,710 to be built by contract car builders include 500 box, 1,350 hopper, 625 gondola and 200 flat cars and 35 cabooses. The 2,705 authorized from second quarter materials comprise 800 hopper and 1,000 gondola cars on order with contract builders and 255 box, 600 hopper and 50 gondola cars on order with the railroads' own shops.

With the new releases, the backlog of cars authorized for building now totals 30,500, including 100 automobile, 6,802 box, 16,893 hopper, 4,416 gondola, 1,548 flat, 216 tank, 225 caboose and 300 refrigerator cars, of which about 19,700 are scheduled in contract car building plants and 10,800 in railroad shops. This backlog is made up of about 6,000 cars remaining to be shipped of the War Production Board's 20,000 car-program for the first six months of 1943, 5,900 authorized for building from third quarter, 1943 materials, 10,100 from fourth quarter, 1943 materials and the approximately 8,500 from first half, 1944 materials.

The number of these cars that will be delivered by the year-end depends on how much material is made available. There

New Freight Car Authorizations by War Production Board

Allocated from First Quarter, 1944 Materials

Name of Railroad	No.	Type	Builder
Alton	250	Hopper	American Car & Foundry
	250	Gondola	General American
Atchison, Topeka & Santa Fe	400	Hopper	American Car & Foundry
	50	Caboose	Company Shops
Central of New Jersey	500	Hopper	Pressed Steel Car
Chicago, Burlington & Quincy	400	Hopper	Company Shops
Chicago, Milwaukee, St. Paul & Pacific	100	Hopper	Company Shops
Detroit, Toledo & Ironton	100	Gondola	Greenville Steel Car
Great Northern	300	Box	Company Shops
Gulf, Mobile & Ohio	125	Gondola	American Car & Foundry
Illinois Central	300	Hopper	Company Shops
Lehigh Valley	15	Caboose	Company Shops
New York Central	400	Box	Company Shops
New York, Chicago & St. Louis	300	Box	General American
	50	Gondola	Greenville Steel Car
New York, New Haven & Hartford	100	Flat	Greenville Steel Car
Pere Marquette	100	Gondola	Greenville Steel Car
	100	Flat	Greenville Steel Car
Reading	25	Caboose	Company Shops
	600	Hopper	Company Shops
St. Louis-San Francisco	150	Gondola	Company Shops
Seaboard Air Line	200	Box	Pullman-Standard
	200	Hopper	Pullman-Standard
Terminal R. R. of St. Louis	35	Caboose	Mount Vernon Car
Virginian	400	Hopper	Company Shops
Wabash	100	Box	Company Shops
	12	Caboose	Company Shops
	200	Gondola	Company Shops

Allocated from Second Quarter, 1944 Materials

Central of New Jersey	1,000	Gondola	Bethlehem Steel
Lehigh Valley	300	Hopper	Bethlehem Steel
New York, Chicago & St. Louis	500	Hopper	American Car & Foundry
Reading	600	Hopper	Company Shops
Wabash	255	Box	Company Shops
	50	Gondola	Company Shops

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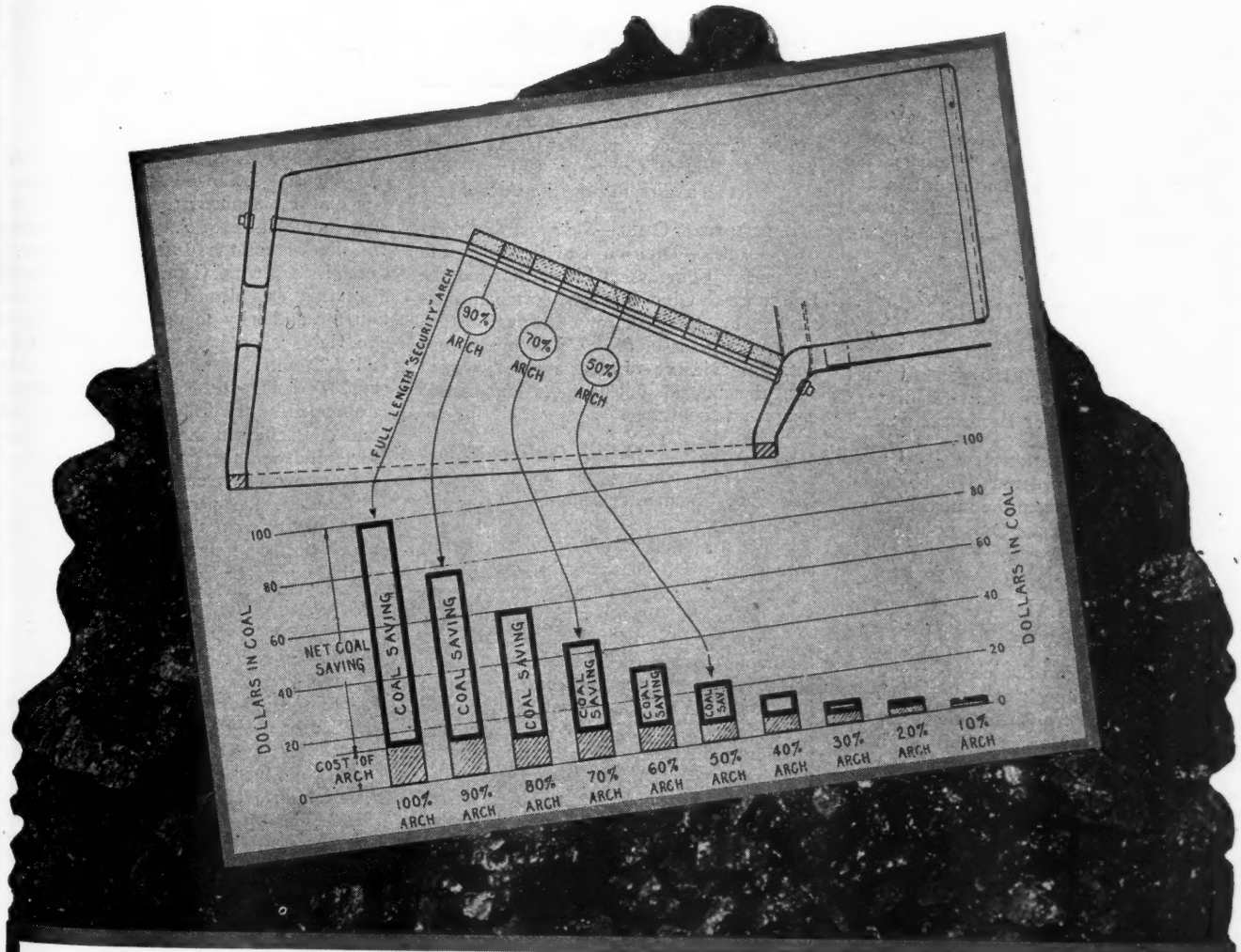
KEEP FUEL-BURNING EFFICIENCY AT A MAXIMUM

Every railroad man is conscious of the wartime importance of each pound of coal.

To make it yield its utmost in steam production is imperative. This is one of the functions of the Security Sectional Arch.

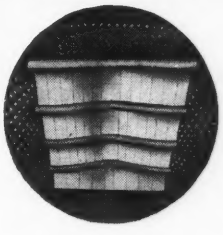
But only a complete arch can achieve the maximum in results. Hence the importance of having full length arches in all locomotives.

This is one sure way of stepping up fuel-burning efficiency.



HARBISON-WALKER REFRACTORIES CO.

Refractory Specialists



AMERICAN ARCH CO.
INCORPORATED
60 EAST 42nd STREET, NEW YORK, N. Y.

Locomotive Combustion Specialists

is a natural time-lag before allotted materials arrive at car-building plants and can be converted into completed cars. It is expected that all or most of the 10,100 cars authorized for the fourth quarter of this year, and probably some third quarter cars, will be carried over for delivery in 1944. The year-end backlog would thus comprise these 10,100 or more cars, the 8,467 already authorized for the first six months of 1944 and such additional authorizations as are subsequently made, and will include cars scheduled for delivery as far in advance as the third quarter of 1944.

There remain about 11,100 cars on order not yet released for building of which 8,400 are on car-builders' books and 2,700 with railroad shops. Among the larger of these placements are the Atlantic Coast Line's order for 1,100 box cars with the Pullman-Standard Car Manufacturing Corporation; the Baltimore & Ohio order for 1,000 box cars with the General American Transportation Corporation and 1,000 hopper cars with the Bethlehem Steel Company; the Chicago & North Western order for 500 ore cars with Bethlehem; the Reading's order for 1,000 gondola cars with the railroad's own shops; and the Southern's orders for 1,052 hopper cars with the Pullman-Standard and 550 box and 400 automobile cars with the Mount Vernon Car Manufacturing Company. Placing of these orders had previously been reported in the *Railway Age*.

FREIGHT CARS

The ST. LOUIS SOUTHWESTERN is reported to have ordered 150 gondola cars from the railroad's own shops, subject to the approval of the War Production Board.

The CHICAGO, BURLINGTON & QUINCY is reported to have ordered 170 box and 175 automobile cars from the railroad's own shops, subject to the approval of the War Production Board.

SIGNALING

THE SOUTHERN PACIFIC has placed an order with the Union Switch & Signal Co. covering the signaling materials for a centralized traffic control installation between Vista, Nev. and Massie. This territory comprises 43.5 miles of single track on the Overland Route just east of Reno, Nev., and the control machine for handling the two-wire code system will be located west of the controlled section at Sparks, Nev. In addition to the c. t. c. control machine and code apparatus, the order includes style H-2 searchlights high, and dwarf signals, dual-control style M-22A electric switch layouts, SL-6A electric locks for main line hand-throw switches, wayside motor car indicators, relays, transformers and housings. The field installation will be carried out by the railroad company's regular construction forces.

IRON AND STEEL

The ATLANTIC COAST LINE has placed an order for 47,000 tons of rails with the Tennessee Coal, Iron & Railroad Co.

Construction

NEW YORK CENTRAL.—This railroad has awarded a contract for the construction of a dormitory building for engine and train crews at East Syracuse, N. Y., to the Duffy Construction Corporation of New York.

PENNSYLVANIA.—This railroad has awarded a contract for the construction of a turntable at Conway, Pa., at estimated cost of $100,000 to the Trimble Company, of Pittsburgh, Pa.

WAR DEPARTMENT.—The U. S. Engineer office, Mobile, Ala., has awarded a contract, amounting to $50,000, to the C. G. Kershaw Construction Company, Birmingham, Ala., for the construction of a coal storage yard and spur track in Alabama.

Financial

ALTON.—*New Director.*—John W. Barriger, vice-president of the Union Stock Yards & Transit Company, Chicago, has been elected a director of the Alton.

BALTIMORE & OHIO.—*Subsidiary's Promissory Notes.*—Division 4 of the Interstate Commerce Commission has authorized the Baltimore & Ohio Chicago Terminal, controlled by this company through stock ownership, to issue $521,725 of promissory notes in evidence of, but not in payment for, the unpaid indebtedness on certain equipment contracts.

CHESAPEAKE & OHIO.—*Preferred Stock Issue.*—This company has applied to the Interstate Commerce Commission for authority to issue, as a stock dividend to its common stockholders, $76,573,000 of preference stock, of $100 par value, to carry a 3¾ per cent dividend rate, cumulative up to four years. The principal amount of common stock outstanding, according to the application, is $191,433,944. The company pointed out that the new issue will, in effect, result in additional capitalization in the amount of $43,106,352, since the difference between that figure and the principal amount of the issue was represented by obligations that have been retired. The purpose of the new issue, the application indicated, is to distribute to stockholders in the form of stock, a portion of the uncapitalized investment of accumulated profits. Specifically, this uncapitalized investment includes $50,747,380 net in equipment and $79,982,561 in various additions and betterments, the application stated. Previously, a statement issued by the company indicated that the proposed new stock issue would also facilitate eventual merger with controlled roads.

CHESAPEAKE & OHIO-WHEELING & LAKE ERIE.—*Acquisition of Stock.*—The Chesapeake & Ohio has applied to the Interstate Commerce Commission for authority to acquire from Blyth & Co., a New York investment banking firm, 60,000 shares of the common stock of the Wheeling & Lake Erie at $52.2158 per share, and hereafter to purchase up to 14,357 additional shares of common or preferred stock of the same road. With its controlled lines, the C. & O. now holds 53.6 per cent of the outstanding stock of the Wheeling, the application stated, and the proposed transaction would bring its ownership up to 67 per cent of the total. As the cost of the additional stock would be met from treasury funds, no financing would be required, it was stated.

The 60,000 shares of Wheeling stock now held by Blyth & Co. formerly were held by the Taplin estate, and the commission recently refused to approve an application of the New York, Chicago & St. Louis, which the C. & O. controls, for authority to purchase this stock through Otis & Co., a Cleveland, Ohio, banking firm (reported in *Railway Age* of October 2, page 546).

CHICAGO & EASTERN ILLINOIS.—*New Director.*—John F. Craddock, vice-president of the Continental Illinois National Bank & Trust Company, Chicago, has been elected a director of the Chicago & Eastern Illinois, succeeding Lieut. Com. Roger C. Hyatt.

CHICAGO & EASTERN ILLINOIS.—*Trackage Rights.*—Following the recommendation of the examiner, reported in this column in the issue of August 28, page 360, Division 4 of the Interstate Commerce Commission, with Commissioner Mahaffie dissenting, has denied this road's application for authority to operate under trackage rights over 1.52 miles of main track and 2.22 miles of mine track of the Chicago, Terre Haute & Southeastern, which is operated by the Chicago, Milwaukee, St. Paul & Pacific, in the vicinity of Peerless Mine, Ind., on the ground that the terms of the proposed agreement do not allow the C. & E. I. to operate over the line in question, so that the proposal does not satisfy the requirements of Section 5 (2) of the Interstate Commerce Act with respect to trackage rights operations.

ILLINOIS CENTRAL.—*Equipment Trust Issue.*—An underwriting syndicate headed by Halsey, Stuart & Co. has offered for sale to the public at prices to yield from ¾ per cent to 3 per cent, according to maturities, a new $15,000,000 issue of Illinois Central 2½ per cent equipment trust certificates, due semi-annually from 1944 to 1951. The offer is subject to Interstate Commerce Commission approval of the financing. The tender submitted by the underwriting group, which was the only one available, was 98.3373. Proceeds of the sale will be used by the railroad to liquidate its remaining indebtedness to the Reconstruction Finance Corporation. (Previous items in the *Railway Age* of August 21 and September 4).

NEW YORK, CHICAGO & ST. LOUIS.—*Debt Redemption.*—On October 20, Nickel Plate directors authorized the redemption on December 1 of the remaining $2,795,200 par amount of the railroad's 6 per cent debentures now outstanding, at par and accrued interest. These debentures, issued in 1940 and 1941, represent the remainder

News Department continued on next left-hand page

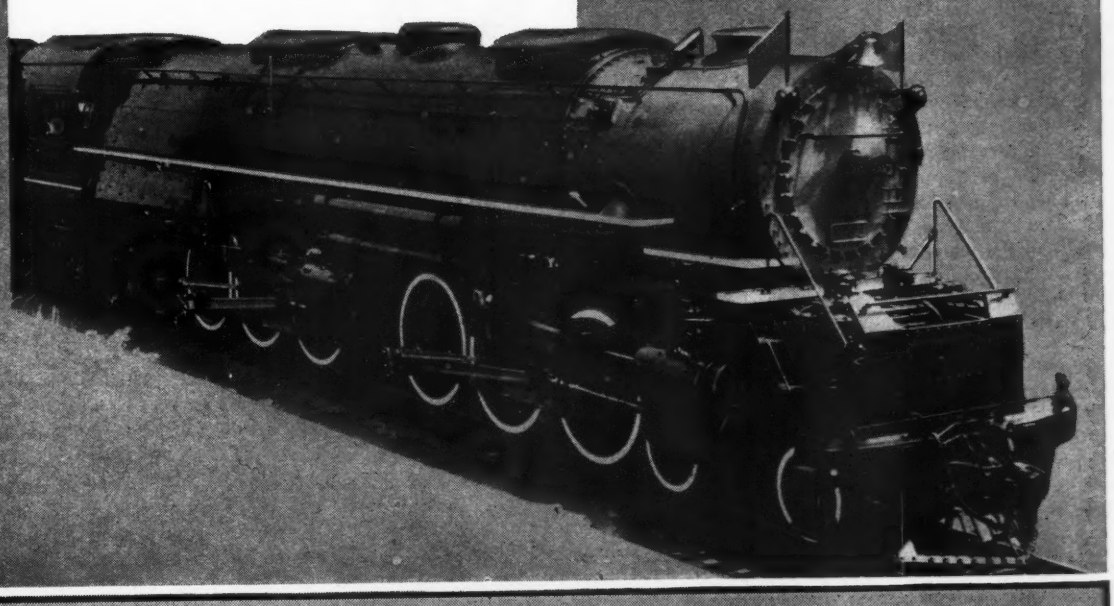
KEEPING UP THE PACE

Long locomotive runs are now the accepted practice for both passenger and freight service.

Increased evaporation, by the utilization of exhaust steam, is a factor in making possible longer locomotive runs . . . and there is no better way to do this than with an Elesco exhaust steam injector. It reclaims maximum heat from the exhaust steam per unit of weight and cost of the equipment.

Get longer locomotive runs with Elesco exhaust steam injectors.

ELESCO



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of the company's $20,000,000 of unsecured 6 per cent notes which were sold in October, 1929, and extended in 1932, 1935 and 1938.

NEW YORK, NEW HAVEN & HARTFORD.—*Reorganization Hearing.*—On October 7, the United States district court at New Haven, Conn., took under advisement the Interstate Commerce Commission's plan of reorganization of the New Haven following arguments and objections to various phases of the plan by 60 lawyers representing a score of interests.

PENNSYLVANIA.—*Pennroad Judgment Appealed.*—A group of stockholders of the Pennroad Corporation have asked the United States circuit court of appeals at Philadelphia, Pa., to remand to the district court a January 19 judgment of the lower court holding the Pennsylvania liable for $22,104,515 to the Pennroad Corporation. Another group of intervening Pennroad stockholders have asked that the judgment be increased to $100,000,000. The lower court's decision is under appeal by both sides.

ST. LOUIS-SAN FRANCISCO.—*Debt Settlements and Interest Payments.*—On October 14, the United States district court at St. Louis, Mo., authorized the payment of $4,504,575 to the Reconstruction Finance Corporation, which, with $685,425 previously paid, will retire the full principal amount of $5,190,000 loaned in 1932 and the payment of $1,300,000 to the Railroad Credit Corporation, which, with $120,000 previously paid, will effect a compromise settlement of that agency's claim for $3,805,175. Both creditors waived accrued interest. The court also authorized the payment of $16,047,377 in overdue interest on various bond issues.

ST. LOUIS SOUTHWESTERN.—*Coupon Payments.*—An amended petition was filed in the Federal District Court at St. Louis, Mo., on October 8, by the trustee of the railroad, which revises the number of interest coupon payments the road proposed to make on three bond issues in its original application of September 11. Hearing on the amended petition was set for October 22. The road seeks to increase from five to seven the number of coupons it proposes to pay on its five per cent terminal and unifying mortgage bonds and to change the dates of payment.

SEABOARD AIR LINE.—*Reorganization Hearing.*—The hearing on reorganization plans scheduled for October 18 has been postponed to October 25 because of the illness of Judge Luther B. Way, of Norfolk, Va., and will take place in Baltimore, Md., before Judge W. Calvin Chesnut.

WESTERN PACIFIC.—*Reorganization.*—The Federal District Court at San Francisco, Calif., on October 11, confirmed the Interstate Commerce Commission reorganization plan for the Western Pacific and approved the appointment of three reorganization trustees whose duty it will be to put the plan into operation. The three are Frederick H. Ecker, New York, representing the institutional bondholders committee; Frank C. Wright, Washington, representing the Reconstruction Finance Corporation; and Robert E. Coulson, New York, representing other creditors.

SPOKANE, PORTLAND & SEATTLE.—*Acquisition.*—This road, controlled by the Great Northern and Northern Pacific through ownership of its capital stock, has applied to the Interstate Commerce Commission for authority to purchase for $863,229, which is the book value of the investment, less depreciation, the property of the Gales Creek & Wilson River, also controlled indirectly by the G. N. and N. P. by ownership of stock.

WABASH.—*Receivership Dissolved.*—In an order entered October 14 by United States District Court, the receivership of the Wabash Railway, pending since 1931, has been terminated, and the two receivers, Norman B. Pitcairn and Frank C. Nicodemus, Jr., have been relieved of further duties. The Wabash Railroad Company, a new corporation, took over the properties of the old company January 1, 1942, and the present receivership has been kept open for "technical reasons only."

Average Prices of Stocks and Bonds

	Oct. 19	Last week	Last year
Average price of 20 representative railway stocks..	37.62	36.86	29.75
Average price of 20 representative railway bonds..	80.00	79.37	68.28

Dividends Declared

Dallas Railway & Terminal.—Preferred, $1.75, quarterly, payable November 1 to holders of record October 21.

Elmira & Williamsport.—$1.14, semi-annually, payable November 1 to holders of record October 20.

United New Jersey Railroad & Canal.—$2.50, quarterly, payable January 10 to holders of record December 20.

Wheeling & Lake Erie.—5½% preferred.—$1.37½ payable November 1 to holders of record October 23.

SWISS RAILWAYS.—In 1942, Swiss Federal Railways carried 158,600,000 passengers, an all-time high and 10.6 per cent more than the year before. On the other hand, private railways, without tourist traffic, reported a bad year. On the federal railways where attempts were made to curtail traffic by the withdrawal of cheap excursions and many extra trains, and also return of tickets, fares totaled 176,000,000 francs, an increase of 8.9 per cent above 1941. Amount of freight traffic handled was 22,300,000 metric tons, a decrease from 1941 of one million tons, and receipts in freight traffic showed 274,900,000 francs, a drop of 3½ millions from the previous year.

There is a shortage of rolling stock reported, due partly to the suspension of automobile traffic for want of tires and fuel. Where in 1913 there were 14,681 freight cars available to handle 14,614,781 tons, in 1941 there were only 17,447 sueh cars, and the total freight traffic reached 23,313,254 metric tons. In 1919 the average freight carried annually by one car was 743 metric tons, but in 1941, 1,336 metric tons. About 500 cars are withdrawn from service daily for repairs.

Military traffic totaled 460,701 tons in 1939 and in 1940 had increased to 1,302,107 tons.

Railway Officers

EXECUTIVE

Charles B. Bryant, engineer of tests of the Southern, has been promoted to the newly created position of assistant to the vice-president, in charge of research and tests, with headquarters at Washington, D. C. **Hobart R. House,** executive assistant, will assist Mr. Bryant.

Carlos J. McDonald, whose appointment as assistant to the president of the Southern Pacific and also president of the Southern Pacific Land Company, was noted in the *Railway Age* of October 16, was born at Monterey, Cal., on December 29, 1880, and attended St. Edward's College, Austin, Tex. He entered railway service with the Southern Pacific in

Carlos J. McDonald

1904 as a stenographer and clerk on the Dallas division of what are now the Texas & Louisiana lines of the S. P. During the following 10 years Mr. McDonald was advanced successively through various positions in the offices of the general superintendent, the division superintendent and the general manager and in 1914 he was promoted to assistant superintendent of transportation of the Pacific lines, with headquarters at San Francisco. In 1917 he was appointed assistant to the president, serving on the Railway War Board; during the period when the railroads were under federal control, he acted as assistant to the district director and assistant to the regional director of the United States Railroad Administration. Following the return of the railroads to private operation, he was appointed manager of perishable freight traffic, with headquarters at San Francisco, and in March, 1929, he was advanced to the position he held at the time of his new promotion, effective October 7.

OPERATING

M. J. Kelly has been appointed superintendent of the Detroit division of the Railway Express Agency, **W. H. Tummonds**

News Department continued on next left-hand page

"Four Way"

BRAKE MAINTENANCE

Helps Keep Trains Rolling

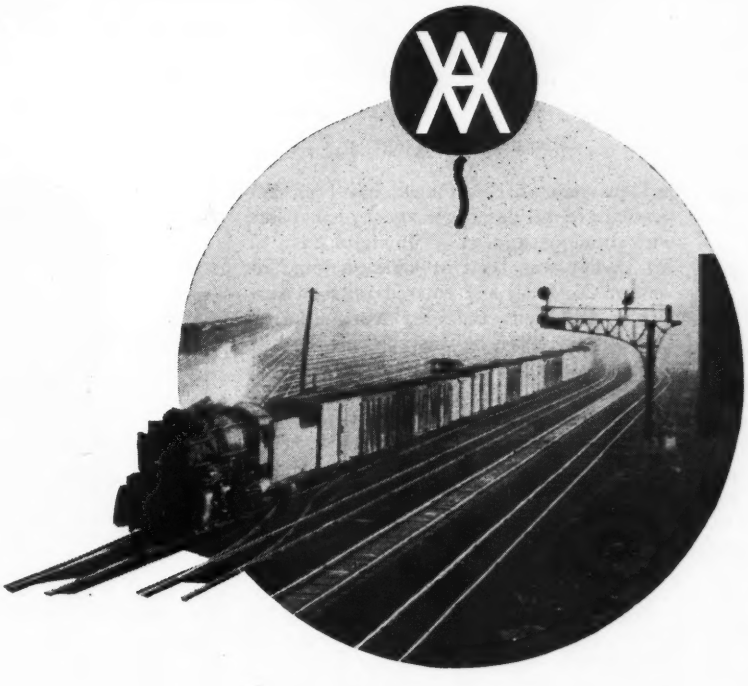
Since the function of Air Brakes in safeguarding and expediting vital freight is even more important today than ever before, we offer the following suggestions as effective means to keep them in good condition.

1 An out-of-order valve should not be taken apart while it is on a locomotive or car. Remove the complete device, or portion, and replace with one known to be in good condition, keeping exposed internal surfaces protected from dirt and injury. All inspection, cleaning and oiling should be done at a shop bench.

2 If minor replacements are necessary, it is sound practice to use "genuine" parts, to insure a good maintenance job without extra machining or fitting. Time and labor are minimized, reliable service prolonged.

3 When a valve needs major repairs, let us do this work for you. We have adequate and proper facilities—skilled mechanics, improved methods, accurate machines and tools. Exacting standards in materials and workmanship are thus maintained, correct performance of reconditioned apparatus is guaranteed.

4 Consult our field men freely concerning your problems of air brake operation and maintenance. They are eager to help you get the best service from your existing equipment on hard-working cars and locomotives.



WESTINGHOUSE AIR BRAKE CO.

WILMERDING, PENNSYLVANIA

has been appointed superintendent of the Detroit Commercial division, and **R. H. Vogel** has been appointed superintendent of the Eastern Michigan division, all with headquarters at Detroit, Mich. **A. G. Smith** has been appointed superintendent of the Cincinnati division, with headquarters at Cincinnati, Ohio.

W. J. Olver has been appointed to the position of assistant superintendent of freight transportation of the New York, New Haven & Hartford.

E. B. Herdman, assistant trainmaster of the Denver & Rio Grande Western at Provo, Utah, has been promoted to trainmaster, with headquarters at Glenwood Springs, Colo., succeeding **R. M. Drake,** who has been assigned to other duties.

C. A. Worst, whose retirement as superintendent of telegraph of the Chicago, Burlington & Quincy, and general superintendent of telegraph of the Colorado & Southern, the Fort Worth & Denver City, and the Wichita Valley (subsidiaries of the Burlington), was reported in the *Railway Age* of October 16, was born at Aurora, Ill., on June 4, 1873, and entered railway service on December 1, 1892, as a clerk of the auditor of expenditures of the Burlington at Chicago, that city being his headquarters throughout his subsequent career with the road. On October 1, 1894, he became a clerk in the office of the superintendent of telegraph, and on November 15, 1898, he was promoted to storekeeper of the commissary department. On November 15, 1902, Mr. Worst became chief clerk of the superintendent of telegraph, and on August 1, 1910, he was advanced to assistant superintendent of telegraph. On October 1, 1918, Mr. Worst was promoted to the position he held at the time of his retirement.

Harold H. Hasselbacher, whose promotion to superintendent of telegraph of the Chicago, Burlington & Qunicy, and general superintendent of telegraph of the Colorado & Southern, the Fort Worth & Denver City, and the Wichita Valley (subsidiaries of the Burlington), was reported in the *Railway Age* of October 16, was born at Yates City, Ill., on April 29, 1889, and entered railway service on August 14, 1906, as a station helper of the Burlington at Oak Hill, Ill. In the same year he was advanced to telegraph operator, with the same headquarters, subsequently serving as relay operator at Galesburg, Ill., wire chief at Omaha, Neb., and St. Joseph, Mo., and chief clerk of the assistant superintendent of telegraph at Lincoln, Neb. On November 1, 1917, Mr. Hasselbacher was appointed chief clerk of the superintendent of telegraph, with headquarters at Chicago, and on August 3, 1925, he was advanced to telegraph censor in the office of the vice-president, with the same headquarters. Later he served as statistician in the office of the executive vice-president at Chicago, and on January 1, 1941, he was advanced to chief clerk of the executive vice-president, holding that position until his new appointment, effective October 1.

TRAFFIC

L. B. Helz, general agent of the Duluth, South Shore & Atlantic—Mineral Range, with headquarters at New York, has retired from that position.

A. W. Lloyd has been appointed general agent of the Wheeling & Lake Erie—Lorain & West Virginia, with headquarters at Washington, D. C.

Bert B. Briggs, freight representative of the Baltimore & Ohio at New York, has been appointed general agent, freight department, of the Alton at Minneapolis, Minn., a newly created position.

Charles F. Yund, city freight and passenger agent of the Chicago, Rock Island & Pacific, has been promoted to general agent, with headquarters as before at Detroit, Mich., succeeding **H. R. Buchanan,** who has resigned.

Rudolph S. Voigt, general eastern passenger agent of the Atlantic Coast Line with

Rudolph S. Voigt

headquarters at New York, has been appointed general passenger agent of that line with headquarters at Wilmington, N. C. Mr. Voigt was born at Chicago, on November 26, 1894, and entered railroad service in 1912 with the New York Central. In February, 1924, he was appointed northwestern passenger agent of the Atlantic Coast Line at Chicago, and in August, 1932, he became eastern passenger agent of that road with headquarters at New York, being appointed general eastern passenger agent at the same location on January 1, 1934. Mr. Voigt held this position until his recent appointment as general passenger agent at Wilmington.

E. R. Comer, general passenger agent of the Pennsylvania with headquarters at Philadelphia, Pa., has been transferred to New York, succeeding **C. Gordon Pennington,** whose death on September 15 was reported in the *Railway Age* of September 18. **H. A. Weiss,** assistant general passenger agent of the Long Island, will succeed Mr. Comer as general passenger agent of the Pennsylvania at Philadelphia. **G. H. Brown, Jr.,** division passenger agent of that road at Pittsburgh, Pa., has become assistant general passenger agent of the Long Island, succeeding Mr. Weiss. Mr. Brown will be replaced as division passenger agent of the Pennsylvania with headquarters at Pittsburgh, by **R. F. Hampel,** who has been serving as district passenger agent of the Pennsylvania at Pittsburgh. **M. F. Jackman,** division passenger agent in the office of the passenger traffic manager at Philadelphia, becomes assistant general baggage agent at the same city, and **A. I. Smith,** chief clerk to the general passenger agent at New York, will assume the position of division passenger agent at Philadelphia.

ENGINEERING & SIGNALING

N. D. Hyde, special engineer in the office of the chief engineer of the New York Central System, West of Buffalo, has been promoted to the newly created position of assistant to the chief engineer of the Lines West of Buffalo, with headquarters as before at Chicago. The position of special engineer, New York Central System, West of Buffalo, has been abolished.

L. F. Pohl, assistant engineer of the Chicago, Milwaukee, St. Paul & Pacific at Miles City, Mont., has been promoted to division engineer of the Kansas City division, with headquarters at Ottumwa, Iowa, succeeding **W. E. Ross,** who has been granted a leave of absence to accept a commission as lieutenant j. g., in the United States Navy.

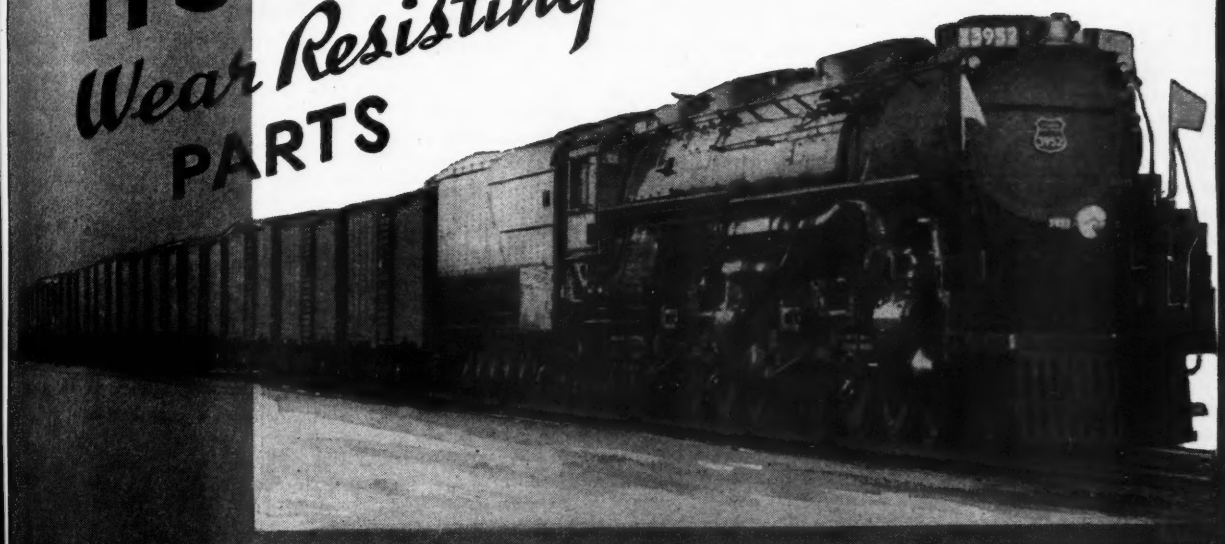
Edward Wise, Jr., whose promotion to engineer maintenance of way of the Louisville & Nashville, with headquarters at Louisville, Ky., was reported in the *Railway Age* of October 9, was born at Henderson, Ky., on January 15, 1894, and attended the University of Kentucky. He entered railway service on June 9, 1913, as a rodman of the L. & N. at Lexington, Ky., and was

Edward Wise, Jr.

appointed assistant resident engineer in the construction department in January, 1914. He left the service for a few months in 1917, but returned to the L. & N. on August 27, 1917, as a draftsman. Mr. Wise was appointed assistant engineer on January 24, 1919, with headquarters at Louisville, and

News Department continued on next left-hand page

HSGI
Wear Resisting PARTS



INSURE EXTRA SERVICE

TODAY'S heavy wartime transportation schedules demand super locomotive performance.

Vital factors which help to insure against the loss of power, fuel and excessive roundhouse repairs are Hunt-Spiller *Air Furnace* Gun Iron wear-resisting parts in the valves and cylinders.

HSGI Bushings, Bull Rings and Packing Rings resist frictional wear and high temperatures . . . insure pressure-tight operation for maximum periods between renewals.

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was promoted to special engineer in charge of grade separation work at Birmingham, Ala. on May 1, 1928. On June 1, 1933, he was appointed division engineer at Pensacola, Fla. and on April 1, 1936, he was transferred to Evansville, Ind. He was appointed assistant engineer in the chief engineer's office at Louisville, March, 1942, but before assuming these duties, he went to Washington, D. C. on a temporary assignment as principal business consultant in the Transportation Equipment Branch of the War Production Board. He returned to Louisville on September 1, 1942, and was promoted to engineer of maintenance of way on October 1, 1943.

E. Y. Allen assistant chief engineer of the Reading with headquarters at Philadelphia, Pa., has been appointed chief engineer of that road at the same location, succeeding **A. E. Owen,** who has resigned this post with the Reading while continuing, as heretofore, to be chief engineer of the Central of New Jersey. Mr. Allen was born at Camden, N. J., and was educated at the Dearborn-Morgan School, Orange, N. J., and Princeton University (C. E., 1899). He entered railroad service in 1901 with the Long Island and was later employed by the Pennsylvania and the Hudson & Manhattan. In 1908 he was appointed town engineer for South Orange, N. J., and in 1909 became selling agent for railroad and mill supplies. During 1910 and 1911 he was office engineer, revaluation of railroads and canals, for the New Jersey State Board of Assessors, then going with the Maine Slate Company of Monson, Me. During 1912-1914 he was engaged in valuation work on several railroads and water works, and made special reports. From 1914 to 1919 he served as assistant valuation engineer of the Philadelphia & Reading (now Reading), later acting as valuation engineer of the Reading. He was appointed special engineer, engineering department, in 1934. In July,

E. Y. Allen

1938, he became assistant chief engineer at Philadelphia, a position which he maintained until his recent promotion to chief engineer with headquarters at Philadelphia.

Lewis S. Billau has been appointed electrical engineer of the Baltimore & Ohio, with headquarters at Baltimore, Md. Mr. Billau, who has been promoted to the position from that of assistant electrical engineer, succeeds **J. H. Davis,** whose retirement as electrical engineer with headquarters at Baltimore, was announced in the *Railway Age* of September 18.

MECHANICAL

H. T. Carter has been appointed road foreman of engines of the Southern, Eastern lines, with headquarters at Alexandria, Va.

A. O. Elliott has been appointed road foreman of engines of the Southern, Eastern lines, with headquarters at Alexandria, Va.

Otto J. Protz, whose promotion to superintendent of motive power, Northern district, of the Chicago & North Western was reported in the *Railway Age* of October

Otto J. Protz

9, was born at Winona, Minn., on February 23, 1886, and entered railway service on April 9, 1903, as a fitter helper in the pipe department of the North Western at Winona. He served as a machinist apprentice and machinist, with the same headquarters, and in February, 1914, he was promoted to roundhouse foreman at Wyeville, Wis. In 1917 Mr. Protz was transferred to Huron, S. D., and three years later he was advanced to general foreman, with headquarters at Belle Plaine, Iowa. From 1920 to 1927 he served in the same capacity at Missouri Valley, Iowa, and Chicago. In April, 1928, he was advanced to master mechanic, with headquarters at Winona, being transferred to Escanaba, Mich., in 1929, and to Clinton, Iowa, in 1931. On October 1, 1939, Mr. Protz was promoted to superintendent of locomotive and car shops at Chicago, holding that position until his new appointment became effective on October 1.

R. H. Beverley, assistant engineer of tests of the Southern, has been promoted to succeed **Charles B. Bryant** as engineer of tests with headquarters at Alexandria, Va. Mr. Beverley was born in Fauquier County, Va., and was graduated from Virginia Polytechnic Institute in 1900. He entered railroad service in 1901 as an inspector, being appointed subsequently chief inspector and assistant engineer of tests.

A. H. Bair has been appointed master mechanic of the Union at East Pittsburgh, Pa., succeeding **George Sanders,** whose illness prevents his fulfilling the duties of this position.

PURCHASES AND STORES

S. R. Proffitt has been appointed assistant purchasing agent of the Western Pacific, with headquarters at San Francisco, Cal.

W. F. Myers, chief clerk of the storekeeper of the Chicago, Burlington & Quincy at Havelock, Neb., has been promoted to district storekeeper, with headquarters at Clyde, Ill., succeeding **C. E. Long,** whose death on October 7 is reported elsewhere in this issue.

OBITUARY

C. E. Long, district storekeeper of the Chicago, Burlington & Quincy at Clyde, Ill., died at Berwyn, Ill., on October 7.

Arthur William Johnson, assistant treasurer of the New York, New Haven & Hartford, died on October 17 at Norwood, Mass. He was 48 years old.

O. E. West, chief of yard and terminal operations of the Baltimore & Ohio, with headquarters at Baltimore, Md., died on October 19 at Cumberland, Md. Mr. West was born near Blanchester, Ohio, on June 9, 1881, and first became connected with the Baltimore & Ohio in 1903 as a freight brakeman on the Ohio division. He was promoted to freight conductor in February, 1918, and the following month became night yardmaster. Six months later he was advanced to general yard master at Chillicothe, Ohio, and on January 16, 1921, he was transferred to St. Louis, Mo. In

O. E. West

March, 1921, he became district supervisor of terminals at Toledo, Ohio, and in April, 1925, was appointed assistant chief of yard and terminal operations. Mr. West was appointed chief of yard and terminal operations, with headquarters at Baltimore, on August 1, 1929.